



Gigachad
Science

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PUSH PULL LEGS

*The king of weightlifting
programs*



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LEGS

Noob Gains

Modified Approach for Untrained Individuals (MAUI):

An untrained person can literally do anything and grow. During the first 4-6 weeks of training, strength is developed from the density of the neuromuscular connection; you're gaining connections to the muscle you already have just by using it.

Use this time to learn the motions of weightlifting without compounding the inherent risk with the additional risk of being unfamiliar with a given motion. Everything in this document still holds true, but make the following adjustments:

Starting weight: For each movement mentioned in this and supplemental documentation, your first attempt should be 15lbs-20lbs on an isolateral movement 30-40lbs on a bilateral.

Progressive overload (detailed later) still applies session-to-session, if the starting weight is light enough that you feel no engagement, increase conservatively.



Reps and Sets: 5x5. Shorter breaks are acceptable because this should not be taxing your system.

5x5 set/reps has been used traditionally as a fool-proof way to do *something*. Your body doesn't know "5 reps" or "5 sets", by no means is this an ideal dynamic system *but* if you're new then it should be heavy enough to develop strength, and your total reps will be high enough to develop familiarity with the movement(s).



3 PILLARS OF WEIGHT TRAINING

TRAIN SMART *AND* HARD

PROGRESSIVE OVERLOAD:

Each time you reattempt a movement (across sessions), increase the total intensity by either increasing the weight or reps.

Easiest way to do this? Add 2.5lbs/5lbs [isolateral/bilateral] and keep reps constant.

LOG YOUR SESSIONS:

Borrowing from Six-Sigma: You cannot control what you cannot measure. You need to be logging what you did, and how well you did it both to give you a reference for your next session *and* to view over time what's working and what isn't.

Manually logging your lifts is the only empirical way to know your strength and muscular endurance.

TRAIN TO FAILURE:

You're never comfortable when you explore new territories. You cannot-- it is *impossible*-- to grow without venturing into the unknown.

If you're not growing, you're dying.

(Reaching mechanical failure is an effective barometer for a movement stressing your muscle fibers sufficiently to "signal" for muscle-protein synthesis i.e. muscle tissue growing and you getting jacked),



EXECUTING THE REP

BREATHWORK AND REP-RATE FOR STRENGTH AND HYPERTROPHY

BREATHING:

A purposeful breathing strategy is more relevant at higher reps but at every level, adequate oxygen is necessary.

1. Hold your breath as you during the eccentric (resisting gravity) half of the motion and exhale during the concentric (following gravity) half.
2. Your exhales are how your body exhausts the heat generated by your muscle fibers. Purposefully breath deeply, but exhale more than you inhale.

Inhale more = Hyperventilation =
Increase Heart Rate

Exhale more = Hypoventilation =
Decrease Heart Rate

TIMING:

You're not just moving weight through space. The amount of time your muscles are under tension to keep a load static (or moving through a fixed path) is known as time-under-tension, and *that's* when the growth happens.

The slower the rep, the more the muscle is under tension and the more you will gain from your rep. Your concentric (hard) movement should be 2 seconds long, with a 1 second hold, and a 2 second returning eccentric (easy) motion. The eccentric is harder to train because you're working with gravity and it feels non intuitive. Fight against entropy.

WARMUP:

A *lot* simpler than you think: perform the movement with 40% of your 1RM (erring on light) for 10, slow reps. That's it! You're stretching the muscle fibers *exactly where they need to be*.



TRIED-AND-TRUE: TWO SETS

Precision engineered rep style for *exactly* what you want.

STANDARD

SET ONE

HEAVY SET

5-10 Reps
~70% of ORM
Training to failure
2 Second Eccentric - 1 Second
Hold - 2 Second Concentric

Muscle only grow when lift hard. Every lift hard if you do enough. Enough should be small though (cardiovascular fatigue eventually kicks in). The ideal number for this re strength is 5-10 reps; for hypertrophy, 16-20.

SET TWO

HYPERTROPHY SET

16-20 Reps
~40% of ORM
Training to failure
2 Second Eccentric - 1 Second
Hold - 2 Second Concentric

It's important to take long breaks during this. This is without question. You will feel like a gutso moxie'd up sailor boy ready to take on the next set, but a recovery of at least 3 minutes will entirely reset your body to bring everything you've got to the second set.



DC TRAINING:

FOR THOSE WHO KNOW WHAT THEY'RE DOING.
SRSLY.

The best, but also the *hardest* way to train is DC (DoggCrapp) training. It is founded on a **full range of motion**, **low volume / high-frequency**, and **rest-pause sets**.

It ensures you train to failure several times over for a given movement, and because of the time saved you can afford to hit the same muscle in different forms.

This is best performed with a spotter. Otherwise, you're psychologically always going to be looking out for your own safety (rather than having a friend present). You're probably going to be machine heavy, which is fine, but does limit your options.

Likewise, this is absolutely not for beginners without the supervision of a trainer or someone far more experienced.

DC TRAINING

ONE SET

DC REST PAUSE

5-10 Reps
~70% of ORM
Training to failure
2 Second Eccentric - 1 Second
Hold - 2 Second Concentric

FAILURE #1

20 Second Rest

10-15 DEEP BREATHS
FOCUS ON EXHALE
STAND IF POSSIBLE

REPEAT

DC-REST PAUSE

REPEAT PATTERN UNTIL FAILURE AT
SET OF 1

IF TOTAL REPS > 15, INCREASE
WEIGHT

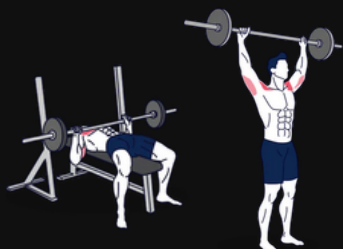
IF TOTAL REPS < 12, DECREASE
WEIGHT



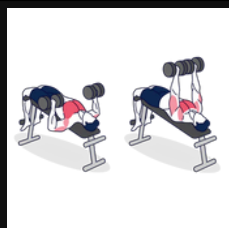
PUSH DAY

STEP ONE: GET JACKED.

COMPOUND AUDIT(S): FLAT BENCH PRESS | MILITARY PRESS ONE-REP MAX



UNTRAINED	0.5x BW	0.35x BW
NOVICE	0.75x BW	0.5x BW
MID	1.25x BW	0.8x BW
JACKED	1.75x BW	1.00x BW
GIGACHAD	2.00x BW	1.4x BW



Decline Bench Press

The decline chest engages the entire span of the chest, while flat bench puts emphasis on the upper-half (and incline on the shoulders and triceps). Great also for anterior delts.

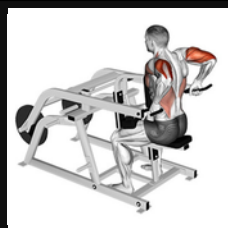
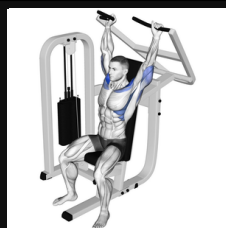


Plate-loaded Seated Dips

This movement lets you really go hard on your chest *and* triceps and is probably the best single upper body workout for it's complexity to benefit ratio.



Military Press

For the standard range of motion of the shoulder, the military press at a full range of motion is the gold standard from which all other variations stem from. Classic is best.

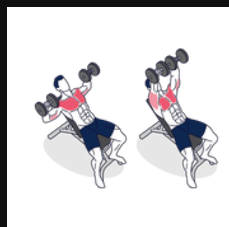
Stand straight, feet shoulder width apart with your arms outstretched in front of you. Gradually rotate your shoulder such that your arm is parallel to your torso (straight down), and then rotate upwards like you're on a roller coaster.

"Pushing" with your arms along this pivot is what push day is. There are two zones for emphasis: the chest, and the shoulders.

The triceps are the largest ancillary muscles to these groups-- contrary to popular belief, the arms don't grow on pull day (when biceps are engaged), but instead on *push* day. The *triceps* account for 2/3 of upper-arm mass and visually are responsible for arm size.

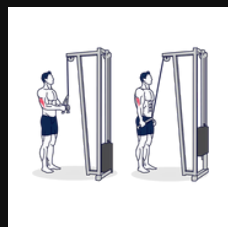


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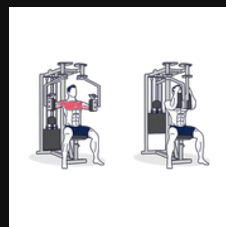
Incline Bench Press

The Incline bench press provides the perfect boost to the upper chest and front delts for the appearance of a broader upper body.



Tricep Rope Pushdowns

The best tricep isolation exercise in my opinion is the top pushdown as you can feel the full engagement of the tricep as you lower the ropes across your body.



Pec Decks

Although redundant, pec decks are useful as they secondarily engage the front delts.

Push Day is arguably the simplest. With the decline bench and *seated shoulder press, you *essentially* have hit all of the major push muscles. We recommend machine because of it's safety profile, but for comfortable individuals the dumbbell variation is goated with the sauce.

The Aesthetic:

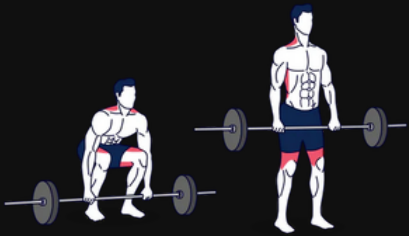
Big Chest big shoulder what do i gotta say?



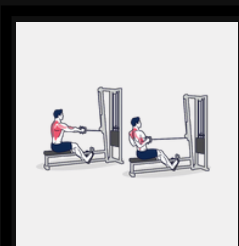
PULL DAY

STEP ONE: GET JACKED.

COMPOUND AUDIT: BARBELL DEADLIFT ONE-REP MAX

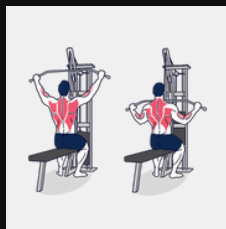


UNTRAINED	1.00x BW
NOVICE	1.5x BW
MID	2x BW
JACKED	2.5x BW
GIGACHAD	3x BW



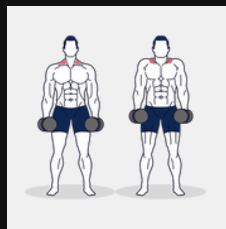
Seated Rows

For the back, hind deltoids, and to a lesser extent the biceps seated rows with proper execution span across the whole back for the development of back thickness.



Lateral Pulldown

For back width, the lateral pull down is responsible for the classic v-taper many lifters seek.

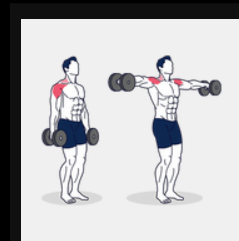


Shrugs

For the appearance that you lift even *when* you wear a shirt, shrugs are *the* isolation exercise for the trapezius muscles.

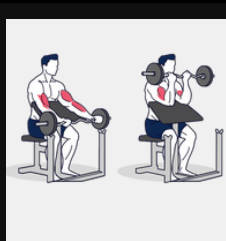


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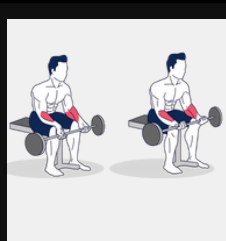
Lateral Raises

Although a shoulder-first movement, lateral raises are incredibly useful for the deltoids and developing a thicker back.



Bicep Curls

Big arms look cool



Forearm Curls

Grip strength is *everything* in upper-body weightlifting, and in being a useful human being.

Pull day engages the entire musculature of your back. Some people like to include the anterior muscles of the legs on this day (think DB RDL's), but that makes leg day as a whole harder and as such we don't recommend!

We can't anticipate what your gym looks like, but whatever row machine you have is adequate for rowing. The most important thing is proper form with your grip, and rowing across the musculature of your back (low-to-high). High-rows are less important because of lateral pulldowns but are always a plus.

Pull day has two optimizations: back thickness, and back width. Both are necessary for strength, but upper-back width is what gives people a "v-taper", and that comes from lateral pulldowns.

PS: Lateral pulldowns are the same thing as weighted wide grip chin-ups!

The Aesthetic:

A strong back pulls your body, straightening your posture and projecting your chest (vanity) muscles.



LEG DAY

STEP ONE: GET JACKED.

COMPOUND AUDIT: BARBELL SQUAT ONE-REP MAX



UNTRAINED	0.75x BW
NOVICE	1.25x BW
MID	1.5x BW
JACKED	2.25x BW
GIGACHAD	2.75x BW



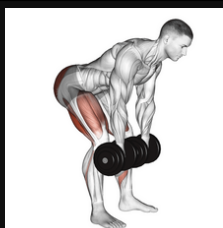
Hack/V-Squat

The Hack/V-Squat is the safest way to truly load and stress the legs to failure, giving you the ability to develop strength without handicapping for your safety.



Dumbbell Bulgarian Split Squat

As the musculature of the foot adjusts to stabilize the weight, you gain incredible balance and strength for lower-level variability.

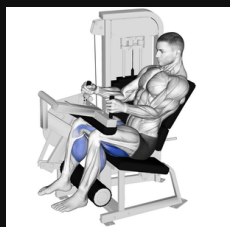


Dumbbell Romanian Deadlift

This is a hamstring focused, slow movement to develop strength across the full range of the hamstring's mobility.

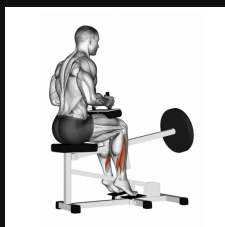


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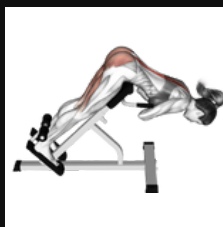
Seated Leg Curls

By keeping your legs fixed, the seated leg curls allow your hamstrings to develop strength. Although the stabilizing muscles aren't engaged, the majority of the hamstring is isolated.



Seated Calf Raises

Calves are ancillary to all leg movements, but *seated* calf raises will isolate the muscle with zero impact to the shoulders or room to cheat with other muscles.



45° Hyperextensions

Fantastic movement for anterior leg development, especially the glutes (which like calves are ancillary to all leg movements).

Your leg has three zones: hamstrings, quadriceps, and calves. However, the hips and feet are *terribly* neglected by even the most experienced athletes.

You could make excellent gains just doing squats and calf raises. The problem is the complexity of the squat--the number of joints involved-- as well as the stress on your shoulder and risk of dropping the bar create new areas where you may have to stop before mechanical failure.

With that being said, the squat can be deconstructed for an *excellent, superior* leg day.

Hamstrings: Romanian Deadlifts & Leg Curls

Calves: *Seated* Calf Raises are unbeatable.

QUADRIPEDAL STRONG: HACK SQUAT + LEG EXTENSIONS (Not pictured but nevertheless excellent leg motion)
TOTAL LEG AND FEET BALANCE:

ADDUCTORS ARE GREAT TOO ALSO
NOT PICTURED SORRY

The Aesthetic:

Leg day uses the most muscle by mass; this is 1:1 with an increase in heat generation, and through this heat calories are burned... leg day is the day you get *cut and burn fat*. Also small legs look ridic



rememebr to have fun :)

