"This Guide is a MUST for anyone beginning a Workout Plan!" –D.T.

ULTIMATE STRENGTH TRAINING GUIDE FOR BEGINNERS

LEARN THE ESSENTIALS TO SBD (SQUATS, BENCH AND DEADLIFTING)

- Gym Basics
- Setting Goals
- Orientation
- Warm Up
- Making it Stick
- Rest and Recovery

BONUS VIDEO INSTRUCTION

BreakThrough

STRENGTH TRAINING: BEGINNER'S GUIDE

Welcome to our beginner's guide to progressions and starting a strength training program. Here is an introduction to lifting weights, how to start a program and how to progress your program.

So you made the decision to go to the gym, lift weights and get fit. However, once you get there, you might ask yourself:

- What body parts am I supposed to work on?
- There are so many machines and weights, where do I start?
- Am I doing this right?
- Am I even feeling this in the right muscles?
- This hurts, am I hurting myself?

If so, this beginner's guide to weightlifting/powerlifting ebook can help guide your visits to the gym and help you achieve your goals!

HOW TO PROGRAM

Decide on Gym Frequency

Don't feel overwhelmed to do everything at once. Try these sample programs listed below. They are two of the most common beginner programs:

Full body 2-3x a week:

Mon	Tues	Wed	Th	Fri	Sat	Sun
Full Body	Rest	Full Body	Rest	Full Body	Rest/Cardio	Rest

Split body parts 4x a week:

Mon	Tues	Wed	Th	Fri	Sat	Sun
Back/Biceps	Chest/Triceps	Rest	Legs	Full Body	Shoulder/Abs	Rest

Both of these plans are good to start with! Determine how much time you can spend at the gym based on your schedule.

Remember: These are just sample plans of what you can do! What works for someone else may not work for you, so give these a try and then tweak it to your specific goals!

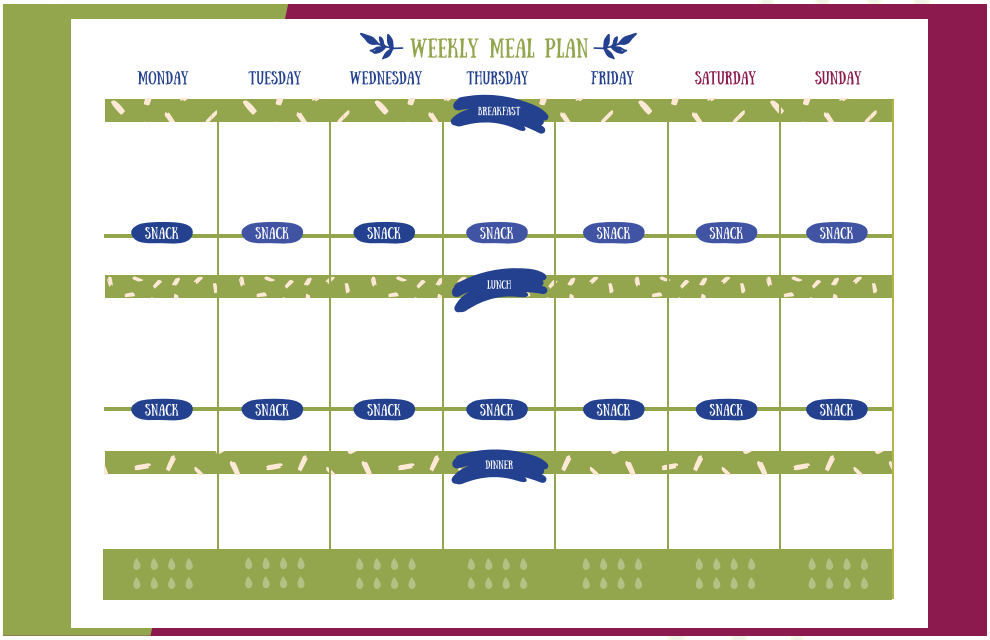
- ☐ Make Goals for yourself!
- ☐ Do you want to lose weight? (e.g. lose 10 lbs, etc).
- ☐ Do you want to gain muscle (e.g. gain 10lbs, etc).
- ☐ Do you want to achieve certain strength standards? (e.g.do 10 pullups, squat 100lbs, etc).
- ☐ Do you want to get more lean? (e.g. gain muscle, lose fat, etc).
- ☐ Do you want to get healthier? (e.g. improve blood work, get off medication, etc).
- ☐ All of the Above.

Making goals for yourself will help give your workouts direction and make every session meaningful! The good news is that you can achieve these goals through consistent exercise, including strength training! Setting short term and long term goals along with a plan can help you achieve them!

Remember: Everyone is on their own timeline, trust the process, stay consistent and you will be hitting your goals before you know it.

Stick to it!

- Consistency builds results!
- Don't fret if you don't see progress in the first month. Muscle takes around 6-8 weeks to actually get bigger, so try to be consistent for at least 3 months to evaluate your progress!



Remember: Exercising is like brushing your teeth. If you brush your teeth for 2 hours one day, and then neglect them for the rest of the week, you will most likely still have cavities! Similar to exercise, exercising 2 hours for one time a week may not give you the results you want. The best exercises are the ones that you will do most often, so choose the ones that make you motivated to perform them!

DEVELOPING YOUR PROGRAM AND ITS COMPONENTS:

Program Checklist

- ☐ Warm up
- ☐ Main lifts
- ☐ Accessory exercises
- ☐ Cool down

1. Know your goal(s)!

- This will make the program more efficient and clear. Depending on your goal and individual abilities, your program will be different from the person next to you. Knowing your goals will help you decide what type of exercises to include and the number of sets and repetitions (reps) you will be performing for each exercise as well as the ideal weight progression.
- The last thing you want to do as you begin or expand your program is to go backwards. This guide should help you take a methodical approach towards your goals.

2. Adding exercises to:

- **Target and isolate specific muscle groups**: the goal of accessory work is to target weaknesses that could be limiting progression of goals in a certain aspect. Because the goal here is to increase the strength/size of the muscle, using hypertrophy sets and reps is generally recommended for these types of exercises. It is important to target specific muscle groups to:
  - **Address muscle imbalances**: It is expected to have imbalances in muscle strength and muscle size due to various factors, these imbalances may affect your weight lifting performance.
  - **Improve joint stability**: Every muscle involved in a movement needs to contribute synchronously to have a successful lift. If there are imbalances enough to cause one muscle to take on more stress, it can be detrimental to your lift and potentially lead to injury.
  - **Improve strength throughout range of movement**: The strength and coordination of a movement vary at different joint angles. There may be positions such as the deep squat that you may feel limited in. This is an opportunity to include exercises to work on those limitations.

3. Setting the number of sets and reps

Generally, the three main lifts are performed for strength. Strength, in the powerlifting world, is the maximum someone is able to push or pull for 1 repetition, known as a 1 rep max (1RM). It is also possible to define strength at different rep ranges as well, such as a 2 rep max (2RM), 3 rep max (3RM) etc.

Here is a good resource to use in estimating your 1RM, 5RM, etc. Remember it is always safer to start lower, use at your own discretion.

Each exercise of the training session may have a different number of sets and reps performed based on the goal. Refer to the table below to help guide these decisions based on your goals.

Goal	% 1RM	Reps	Sets	Rest
Power	75-90%	1-5	3-5	2-5 mins
Strength	≥85%	3-7	3-5	2-5 mins
Hypertrophy	70-85%	6-12	3-5	30-90s
Endurance	60-75%	12-20+	2-3	≤30s

Disclaimer: even though you may set certain reps and sets you want to achieve for the day, we can not emphasize enough to **make every repetition count, every rep should aim to look as good as your best one**, including warm up/lighter weights.

4. Progression

The following are some variables to try:

- Increase weight being lifted: safely, it is recommended +2.5-5 lbs each side, especially the closer you are to your 1RM.
- Increase number of repetitions performed per set.
- Increase number of sets performance.
- Decrease rest time in between sets.
- Increase difficulty of exercise with different variations.

5. Adding warm up and cool down periods!

Warm up: To perform optimally, your muscles need to have activity gradually introduced to them. The following are ideas to start with:

- Dynamic stretching prior and/or short static stretching (<1 min holds).
- Light cardio to improve blood flow.
- Prime stabilizers and targeted muscles for that session.
- Similar movements to mimic the big lift of the session.
- Corrective exercises.

Time can vary depending on the individual, make sure you feel that you are ready for your session.

Cool down: e.g. static stretching, mobility/flexibility work and light intensity movements such as walking, elliptical, and/or biking to reduce muscle soreness.

6. Rest and Recovery

It is generally recommended for 2-3 rest days per muscle group after the workout but do what works for your body!

- Rest and recovery is part of the training.
- Your body performs the anabolic (muscle building) process when you rest, NOT when you are working out. More is not always better, especially for hypertrophy.

Important for:

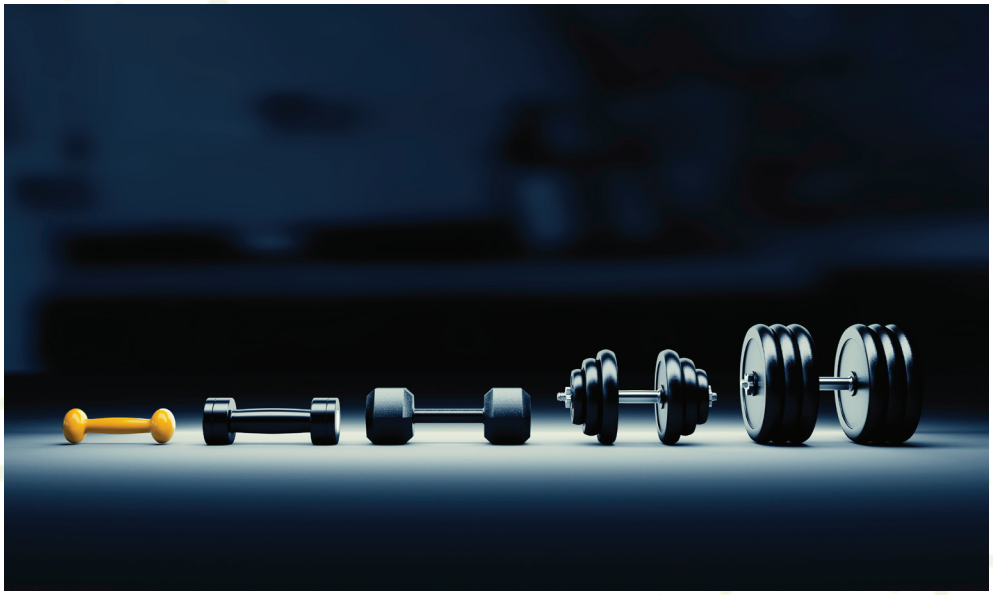
- Decreasing risk of injuries: most injuries occur during high loads and fatigue.
- Avoiding overtraining: repetitive stress and strain on muscles and joint structures give them no time to recover.
- Optimizing building muscles: exercise creates microscopic tears and stress to muscle tissue and cells which need time to repair and build up.
- Stable energy levels: glycogen is an energy stored in muscles that are used during exercise. Decreased levels lead to muscle fatigue and decreased performance in the gym.
- Mental health: tiredness and decreased motivation can occur with inadequate rest.

Additional Considerations

- Make sure that you are eating healthy with adequate nutrition and hydration.
- Getting enough quality sleep.

7. Miscellaneous

Don't be afraid to try new movements: If you see someone do an exercise and you haven't done it before, try it out and see how you like it! You may like it enough to add to your routine!



Remember:

- Progression does not always mean more weights or more sets. It can also mean being able to do exercises easier than you were able to do it a week ago.
- Don't be afraid to move things up or regress them if needed. Sometimes, you need to take a step back to take two steps forward!
- Progression will not always be consistent or linear, there are many contributing factors. Make sure that you feel safe and comfortable performing the weight chosen. Listen to your body!

Continue reading for more information about the three main lifts of powerlifting: squat, back squat, deadlift.

THE COMPREHENSIVE GUIDE TO SBD

Welcome to the ebook about the lifting that everyone is raving about! If you are here because you are interested in the fun world of powerlifting, you are in the right place. At BreakThrough, we are passionate about helping others get the most from their time and efforts in the gym. Here, you will learn some tips and tricks to develop your strength training program as well as review some basic fundamentals of the three main powerlifting lifts: squat, bench and deadlift.

This can be helpful for beginners and intermediate athletes who may have questions with the vast information that is out there. Our goal here is to help guide you towards the direction you want to go, whether it is to gain strength, reduce pain or adjust your lifting form. We hope you enjoy reading this information as much as we had creating this. Happy reading!

Please consult with a medical provider/fitness professional if you have health concerns prior to starting a training program. There is no replacement to one on one professional assessment and guidance.

THE THREE BIG LIFTS OF POWERLIFTING

Objectives

- Discuss basic techniques of squat, bench and deadlift.
- Discuss common deviations seen with the lifts.
- Discuss ideas for accessory work to promote squat, bench and deadlift.

Squat

Squat Setup

Lower Body

a. Place your feet outside shoulder width. Again, this will vary based on your anatomy and comfort, so try different stance widths to see which feels most comfortable to you.

b. Have the feet either straight or slightly flared out (as shown in the picture below) Again, this depends on comfort, so try different options and see what works best for you!

c. Once you have your stance width, optimal foot pressure is known as the tripod foot: this is equal pressure on the ball of your 1st toe, ball of your 5th toe and your heel.

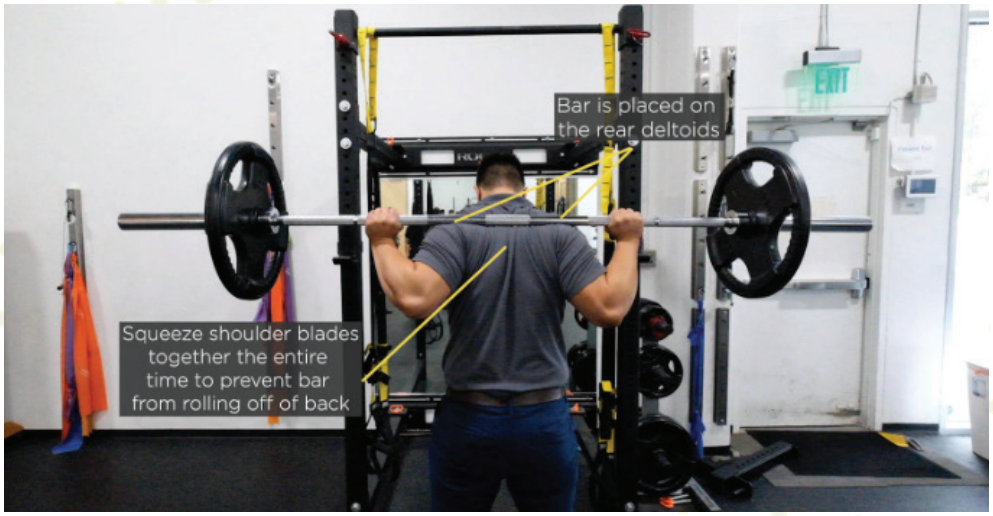
Upper body

Low Bar Squat

a. Start with the bar resting on your posterior deltoid muscles.

b. Keep wrists in neutral with hands just wider than shoulder width. Hand position can change based on comfort and available shoulder mobility.

c. Squeeze the bar with your hands and pull the bar securely into your posterior deltoids while pulling your shoulder blades together.



High Bar Squat

a. Start with the bar resting on your upper trapezius muscles.

b. Keep wrists in neutral with hands just wider than shoulder width. Hand position can change based on comfort and available shoulder mobility.

c. Squeeze the bar with your hands and pull the bar securely into your upper trapezius muscles while pulling your shoulder blades together.

3. Performing the Lift

Low Bar Squat

a. Keeping your back straight, you are going to squat by bending at the knees and pushing your butt back, imagining that you are pushing your butt back towards a wall until you get your thighs parallel with the ground.

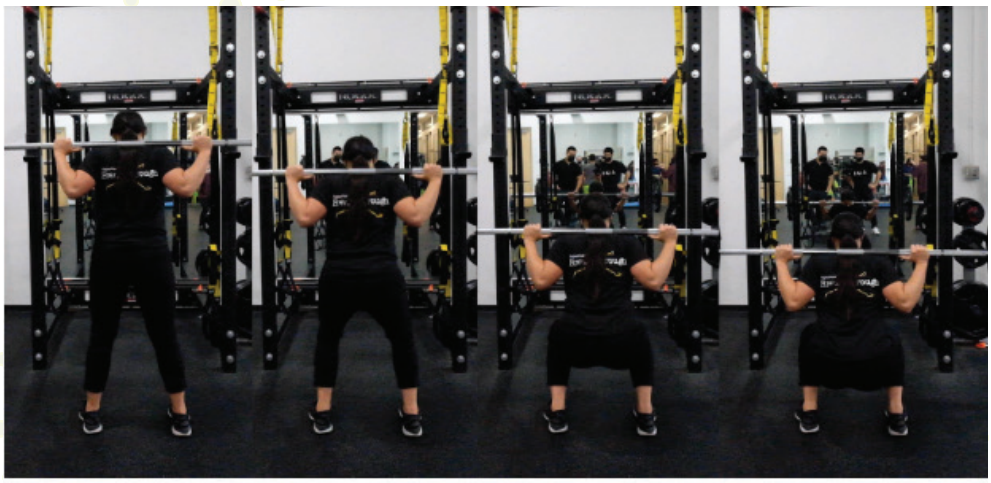
b. Then, push through your tripod feet to activate your glutes and quadricep muscles to stand back up to finish the lift!

c. Bar path: generally whether it is low or high bar squat, you want the bar to be traveling up and down smoothly and controlled within a vertical line as much as possible.

High Bar Squat

a. Keeping your back straight, you are going to squat by sitting down, bending at the knees and hips until you get your thighs parallel with the ground.

b. Then, push through your tripod feet, pushing the ground away from you to activate your glutes and quadricep muscles to finish the lift!



Common deviations:

Knee valgus: term for when knees are caving inward.

- Depending on where it is occurring in the motion, it can lead to potential lost in energy and/or be detrimental to your lift.
- Over time, it can also cause hip, knee and/or ankle issues, reduction in functional movement or worse.

Butt wink: known as rounding of lower back during descent followed by arching during the ascend which can lead to concentrated stress at the moving segments. The higher the load and reps performed, the higher the risk of injury.

If I have a butt wink, will I have pain?

It depends! There are so many variables, it is hard to say a definite answer without knowing the individual's abilities. There are some athletes who can tolerate it without pain and there are some who are more sensitive to that load which may lead to pain.

If you have pain in your lower back after/during loaded squats, it is worth looking into.

Heels lifted at the bottom of the squat

Commonly due to ankle immobility or if weight/bar is "pulling you forward" or if you shift forward onto the toes when descending or ascending in the lift.

Tips:

- Make sure your feet are in the tripod position, going as low as you are comfortable with while your heels are on the ground.
- If needed, you can perform squats with your heels lifted either by small plates or specific lifting shoes. Note: doing this change can cause differences in the way your squat feels and what muscles are being used. If you are unsure how this will affect your body mechanics, consider consulting a physical therapist before attempting.

Good morning / Table top squat: when the hips raise while the trunk stays leaned forward, often leading to hyperextension of your low back or excessively forward trunk lean during the ascend.

Tips:

- Imagine there is a triangle on the back of your neck and you are driving that up towards the bar as you push up.

Warm up and accessory lifts to barbell squat:

Ideas to consider pairing with your squat:

WARM UP	ACCESSORY WORK
Body weight squats	Variations: pause squats, tempo squats, front squat, goblet squats, box squats
Progressive barbell squats	Bulgarian split squat
Hip adductors/internal rotators exercises	Single leg squat/lateral step down
Hip abductors exercises	Single leg russian deadlifts
Single leg exercises	Lunges
Foot arch stability exercises	Leg press
Core/anti-extension exercises	Hip thrust/bridges
Deep squat mobility	Lat pulldown

This is not an all inclusive list and in no order of importance, just ideas to start with.

BENCH PRESS

Bench Press Setup

1. Lower Body

a. Place your feet flat on the floor and slide your feet slightly behind your knees. This will create tension in the quads, almost forcing your body to slide up the bench from where you are. If you are not able to get the feet flat on the floor, consider putting a weight plate on the floor to support your feet.

b. Squeeze glutes on the bench. This completes the lockout of the lower body. Do not let the glutes leave the bench during the movement.

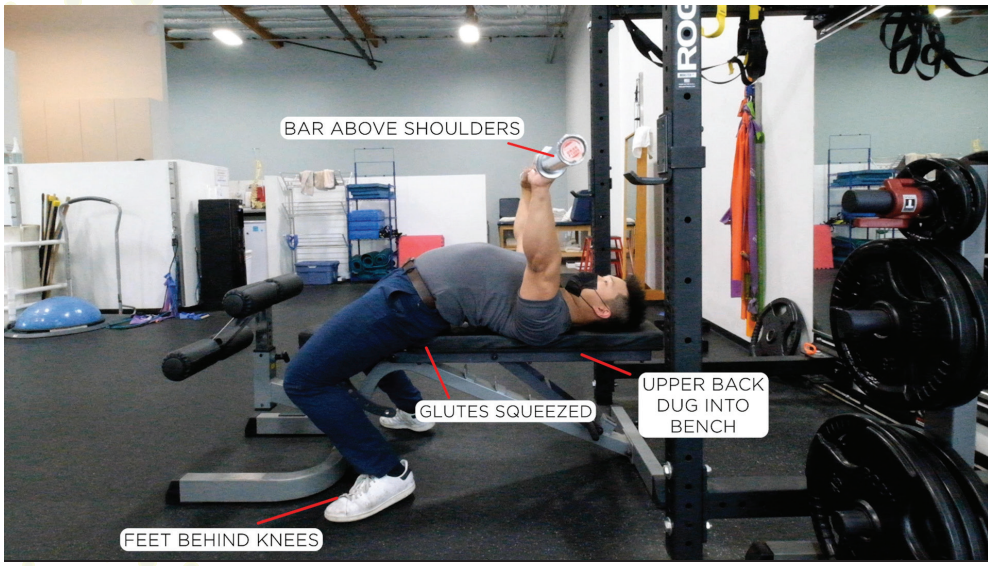
2. Upper Body

a. Dig your upper back into the bench such that your eyes are underneath the bar.

b. Activate the scapular muscles by drawing them together and down.

c. By the end of these steps, you should have a decent arch in your low back that is maintained through tension in the lower and upper body. This gives the most stable surface to push when performing the bench press.

d. Place your hands about 1.5x shoulder width on the bar above you. Make sure wrists are neutral.



3. Performing the Lift

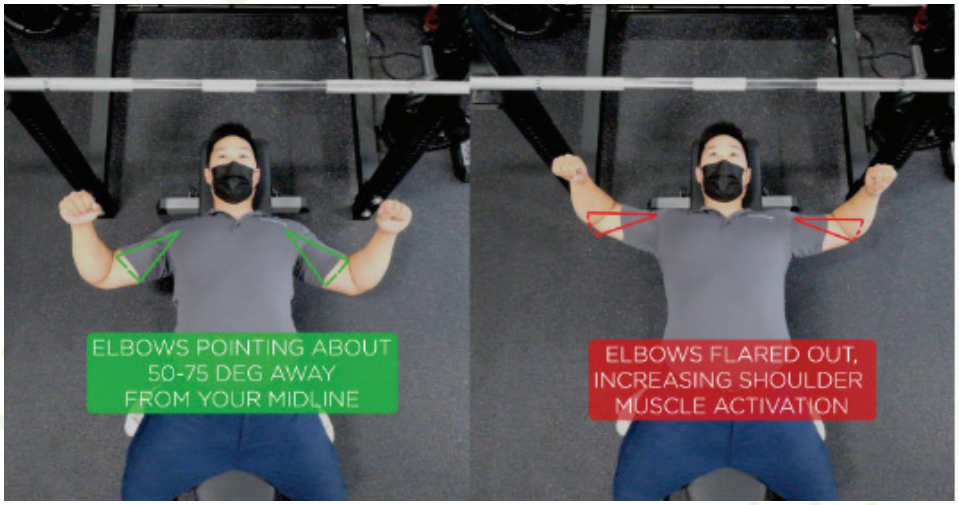
a. While keeping your elbows slightly bent at a 30 degree angle, lower bar to right under your chest (between the xiphoid process and nipple line), and press the bar back to the starting position to complete the movement.

b. Bar path: this minimizes stress on shoulder and aligns to engage the pec muscles more than the shoulder.

Common Deviations

Flared Elbows (90 degree shoulder)

- Can lead to shoulder overuse and pain over time. In general, we want the shoulder blades to be anchored when performing the movement so there is no instability when pushing heavier weights.



Tip: when you are positioning your hands on the bar, imagine you are "bending the bar" or "pulling the bar apart", this will help engage your external rotators and scapular muscles which will bring your elbows inward.

Butt coming off of the bench when pushing bar off of chest

- Doing this too much can result in back pain or back cramps, and at higher weights, back injury.

Feet coming off of the ground when pushing bar off of chest

- This means that the feet are not anchored and there is no drive from the legs when performing the lift, leading to back arch collapsing and an inefficient transfer of power into the bar.

Having elbows bent at the end of the lift (half rep)

- Make sure the barbell goes all the way down to touch your chest and returns to the starting position in the air with elbows straight, but not hyperextended.
- If you are looking to compete in powerlifting, this is important to make your lift count in competition.

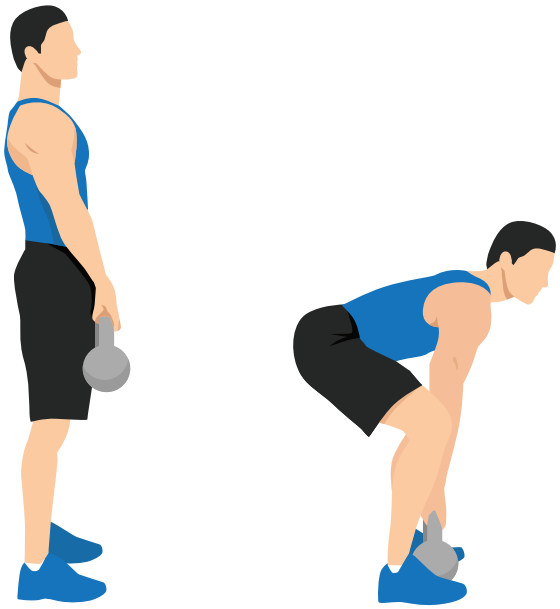
Warm up and accessory lifts to barbell bench press:

Ideas to consider pairing with your bench press

WARM UP	ACCESSORY WORK
Push ups	Overhead/Military press
External rotators exercises	Cable flys: incline, decline, neutral
Low and mid traps exercises	Single arm bench press
Bent over rows	Pause bench press
Deltoid raises	Dumbbell bench press
Incline and decline bench press	Incline/decline bench press
Band pull apart/horizontal abduction	Dumbbell or cable triceps exercises
	Tricep dips
	Bicep exercises
	Deltoid exercises: anterior, middle and posterior

This is not an all inclusive list and in no order of importance, just ideas to start with.

DEADLIFT



Deadlift Setup

1. Lower Body

a. Start with feet slightly narrower than shoulder width. Some people prefer a wider stance, so try different positions and see what feels the most comfortable to you. Once you find your stance, you are going to be in the same tripod position as described in the squat section.

b. Shins want to be almost touching the bar and vertical (or perpendicular to the ground).

c. Knees should be behind the bar with hips higher than the knees.

2. Upper Body

a. Grip: full contact with either double overhand grip (both hands down grabbing the bar) or mixed grip (one hand down and one hand with palms facing away from your body.

b. Back positioning: In general, the most optimal position for starting a deadlift is a neutral, or straight back position.

The only case where back rounding is somewhat acceptable is in the thoracic spine. HOWEVER, there should be a set amount of rounding at the start of the lift that does not change throughout the lift. If you are losing tension in your back during the lift and your back rounds due to this, this is sub-optimal and also puts you at greater risk of injury.

3. Preparation for the lift: "taking out the slack of the bar"

a. All great deadlifts start with good preparation. Generally, the tighter you can lock up your lower and upper body, the safer you will be able to complete your lift.

b. To adequately tension your body, you want to:

– Engage your scapulae and latissimus dorsi muscles. This can be accomplished by imagining pulling your arms back while holding the bar and squeezing your armpits together.

– Imagine all the force of your body under your feet and think about pulling the bar towards you while maintaining lower and upper body positioning.

– At this point, you should feel the bar lift up slightly and push up against the top of the weights, with lighter weights starting to leave the floor already.

c. This preparation should be occurring within a second, you should not be in this phase for a long time.

4. Performing the lift

a. Keeping your pretension, **push the ground away from you**: force should be through your legs as you hold your spine in the same position you started in. You should feel like you are pulling up just as much as you are pushing into the ground.

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b. During the deadlift, it is divided into two phases.

– The first phase is a push with your feet, while you maintain a neutral back position. Pushing with your feet forward and down allows you to push with your whole foot. Avoid pushing with just your heels..

– The second phase is the pull when you finish the lift by straightening your back by activating your glutes to finish off the movement (such as when performing a hip thrust). Pulling with your upper back and hips back and up will keep the weight as close to you as possible, allowing proper hip hinge and to keep the weight's moment arm closer to your center of gravity.

c. Bar path: generally, as you are moving up and down, you want the bar path to going up and down as vertical as possible.

d. Locking out: finishing the movement with your legs so that you pelvis is under you in your neutral position.

Here is a video on how to perform a deadlift, key notes from this video is that there is adequate tension through the upper back with proper lat engagement, hips are down, the power is coming from hips and the back does not change position from the start to the finish.

Deadlift - video correct

Common Deviations

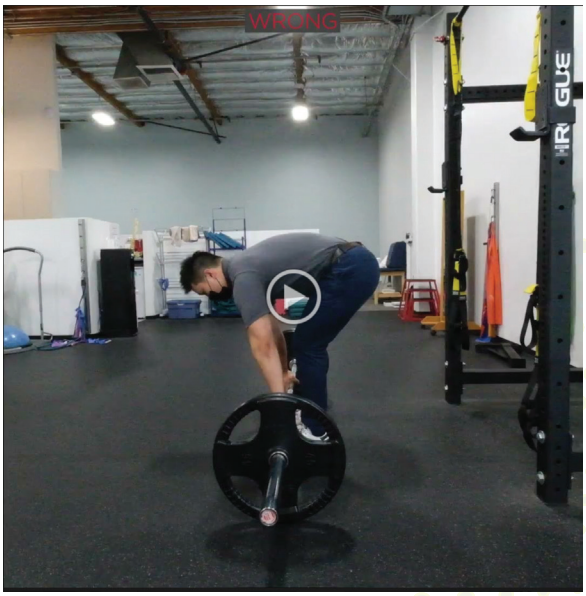
Rounding of low back during lift

- This means that the low back, and to some extent, the upper back, is not tight when performing the lift. This makes the lift inefficient overall because you are relying on the low back to finish the lift instead of using glutes and hamstrings. While this might still allow you to lift lower weights, your potential to lift higher weights will be significantly lower because you need all portions of your body to contribute to a successful lift.

Tip: remember to pull just as much as you are pushing.

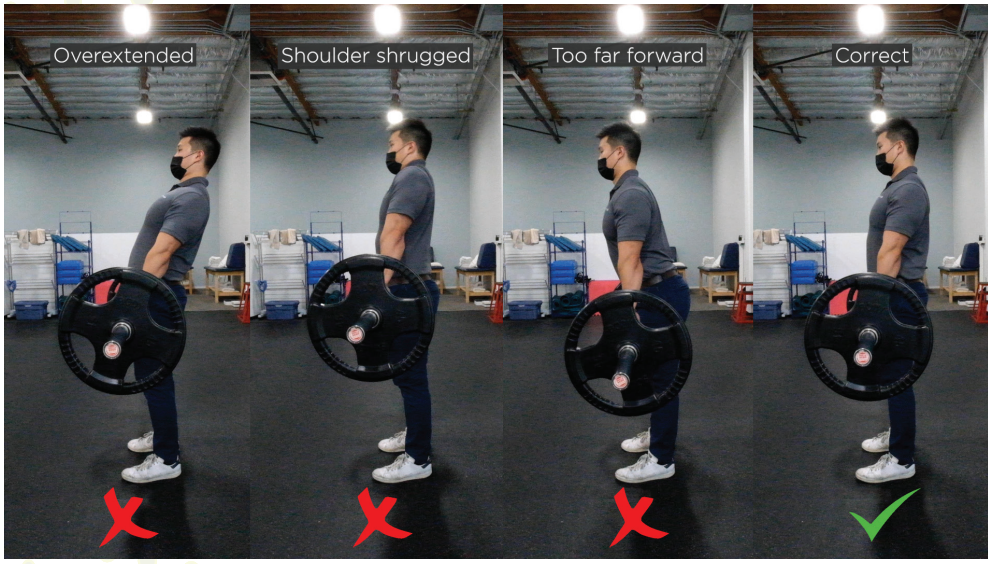
- Here is a video of pulling with a rounded back. In order to correct this lift, the hips should be lowered, and the lats should be contracted to straighten the back.

Deadlift - video incorrect



Failing to lock out or finish the lift

- Having either bent knees or slightly bent forward position of the low back at lockout will result in unnecessary force at the quads and back extensors respectively.
- Instead, make sure that hips are all the way underneath you and knees are straight to make your lift complete.



Warm up and accessory lifts for barbell deadlift:

WARM UP	ACCESSORY WORK
Kettlebell swings	Variations such as rack pull, deficits deadlifts, pause deadlifts, tempo deadlift
Roman chair glute extensions	Hip thrust
Hip abductor exercises	Leg press
Core/anti-extension and anti-flexion exercises	Good mornings
Step ups	Farmers carry
	Push and pull sled
	Lat pulldowns
	Posterior oblique sling exercises
	Bent over rows

This is not an all inclusive list and in no order of importance, just ideas to start with.

Putting all this information into consideration, find what works for you. Remember that everyone will be different in how their program is set and what techniques work best for them. It is a trial and error process. Do not be afraid to ask questions and reach out to fitness professionals so that you can reach YOUR goals. Now that you are more knowledgeable, go kill it!

We hope you have found this extremely helpful and we encourage you to share with your network, open it up for discussion and reach out if we can help you on a more individualized basis. BreakThrough provides one on one care both in the clinic as well as virtually on a worldwide basis to people at all levels of lifting. BreakThrough is here for you!

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