

THE COMPLETE GUIDE

To Building Muscle and Burning Body Fat

As you will find in this guide building muscle is not only important for aesthetics and function but also to make you a metabolic fat burning machine. This is a practical guide to educate you on how to build muscle with functional examples you can apply to your training today! Muscle has to be stimulated by two processes, resistance training and protein consumption, but it's created in the recovery process. Doing these things in the right order, with the right amount and the right timing will save you months of frustration and hours in the gym. I broke this guide into 3 parts and gave you actionable steps you should start following today.

- 1. How to build muscle What to do in the gym
- 2. How to feed your muscles What to do in the kitchen
- 3. How to grow your muscles What to do to recover

PART I HOW TO BUILD MUSCLE

First let's talk about how muscle is built so you can understand what you need to do in the gym to maximize your results and minimize the time you spend in the gym.

Muscle is built most efficiently when 3 things happen in your workout.

- 1. Mechanical Tension is applied to the muscle: this is the amount of force produced in muscle fibers when you are performing a resistance exercise. There is active and passive tension on muscle during different phases of lifting.
 - a. What it means for you: You need to go through a full range of motion in every movement because that is what creates maximum tension when the tissue is loaded. This can be done with a variety of different implements like weights, bands, chains, machines and even your own body weight. Mechanical tension is the key muscle building stimulus but to maximize the results from it, you have to do the next two things as well.



- 2. Damage the Muscle: It may Sound Scary, But It's a Key to building muscle and burning fat. The damage is the microscopic "tears" to the muscle fibers that happen with high levels of tension. The fibers heal bigger and stronger so they can deal with future stress, this is called hypertrophy.
 - a. What it means for you: The soreness you feel in your muscles the next day is a direct result of the muscle damage from your workout, as this heals, the muscle grows back bigger and stronger. There needs to be some level of soreness (not completely crippled, that is counter productive) from each workout to maximize results.
- 3. Cellular fatigue: Is a host of chemical changes that occur inside and outside muscle fibers when they contract repeatedly. This comes from working the muscle to near failure and causes the hormone cascade necessary to grow the muscle.
 - a. What it means to you: The "sticking point" when you are coming out of a squat or pushing through the last rep in your bench press and your movement almost comes to a complete stop...BUT you push through it. This creates cellular fatigue or "the burn" so working close to failure is necessary to grow muscle and improve strength.

Now that you know how to grow muscle let's talk about what you actually need to do in order to grow muscle.

- 1. Most of your workouts (80-90%) should be geared towards muscle growth. That means doing reps in the range of 8-12 reps but it will include some higher rep work to groove form and increase metabolic stress.
- 2. You shouldn't spend more than 45 minutes to 1 hour in the gym 4-5 days per week. This is true working out time so put down your phone, put in your earbuds and get to work.
- 3. Your main goal is to push yourself in the rep range to within 2 reps of failure. This is called reps in reserve and is the critical intensity needed to produce muscle growth.

Ex- in a set of squats with a rep range of 8-10, you should feel like you can't do more than 2 more reps once you get to 10. If you think you could do 2 more reps, then add weight to the bar for your next set. If you get to 10 reps again in the next set, add more weight to the bar for your next set. Be honest with yourself because this is where most people don't push themselves hard enough and they stall out.



- 4. Between sets of compound movements, rest for 90 seconds to 2 minutes. YES, that's how hard the set should be to recover from and in order to have a high level of quality on the next set.
- 5. DO COMPOUND MOVEMENTS. This means moving multiple joints through a full range of motion or stimulating as much muscle as possible for that lift. Ex- A barbell back squat vs. a leg extension machine.
- 6. You only need 4-6 exercises per workout. The more compound the movement, the less exercises you need per workout.
- 7. All you need is 3 hard working sets per exercise. That means you should warm up the movement with 3-5 progressively heavier sets that descend in reps building up to your working weight BUT this is dependent on where the exercise is in your routine. If it's the first exercise you might need 5 sets to warm up, if it's the last exercise, you might only need 2 sets to warm up. Let's take the barbell back squat as an example and say it's your first exercise in your leg workout with your working sets at 8-10 reps.
 - a. Set 1- empty bar for 20 reps with a nice slow tempo and a few pauses at the bottom of your squat to stretch the muscles.
 - b. Set 2 25lbs on both sides for 15 reps, again with a few pauses at the bottom to stretch and warm up the muscle.
 - c. Set 3 45lbs on each side for 12-14 reps moving at your working set pace.
 - d. Set 4 Within 20-30 lbs of your working weight for 10-12 reps.
 - e. Set 5 5-10 lbs below your working weight for 8-10 reps.
 - f. Start hard working sets...



What a typical week of working out to maximize muscle growth should look like:

Day 1:

Chest & Abs

Day 2:

Back & Calves

Day 3:

Rest

Day 4:

Arms & Abs

Day 5:

Shoulders

Day 6:

Legs

Day 7:

Rest

If you can't lift 5 days per week then combine the arm days to create an extra rest day. This will increase the time to perform those days but only by 15-20 minutes since you will already be warmed up.

Compound lifts for each body part

Chest

Incline and Flat barbell bench press
Incline and Flat dumbbell bench press

Dips

Pectoral dumbbell or cable flys

Back

Barbell deadlift

Barbell and dumbbell row

V-bar row

T-bar row

Single arm cable row

Lat pulldown

Pull up and chin up (weighted if possible)



Shoulders

Standing strict press (bar or DBs)
Seated Arnold DB press
Standing push press (bar or DBs)

Legs

Barbell back squat
Barbell front squat
Leg press
Hack squat (plate loaded)
Romanian deadlift
Lunges (barbell or DBs)
Standing and seated Calf raises

Arms

Curl (E-Z bar or DBs)

Preacher curl
Incline bicep curl
Chin up
Tricep pushdown (rope/cable)
Overhead tricep press (DB or E-Z bar)
Weighted dips
Skull Crusher with E-Z bar

Abs

Do 3-4 sets of a weighted exercise in the 8-10 rep range each week in a circuit. Do a set

weighted and then do a set unweighted to failure of the same movement. Ex-Weighted cable crunch for 8-10 reps followed by lying crunches to failure. These aren't technically compound exercises but the abs are made to stabilize the spine so they get worked with most compound lifts as well.

Accessory Exercises

You should add in accessory exercises to compliment the compound exercises above. Such as DB lateral raises for your shoulders, DB front raises for your shoulders, variations of tricep exercises and bicep exercises as well as back exercises like rear deltoid flys.



Conditioning exercises

This guide isn't geared toward conditioning but to round out your fitness I would suggest 60-120 minutes of conditioning each week. This could be in the form of Zone II cardio work (cycling, running, swimming) or a combination of high intensity work in intervals.

PART II HOW TO FEED YOUR MUSCLES

Now that you've got the lifting down, to really increase your muscle growth and maximize your efforts in the gym, it's all about the kitchen and feeding your muscles for growth. Remember calories are what fuel every process in your body and the requirements for muscle building are very metabolically expensive. Therefore, if you want to maximize muscle growth, you need to make sure you have a slight surplus of calories (you are taking in more calories than you are burning). But not just any calories, in order to "feed your muscles", eating enough protein is critical. In fact, it's just as important as eating enough calories when it comes to muscle growth.

Having said that, don't misunderstand me and think that protein is what fuels your muscle building efforts. This is where carbohydrates step in as the preferred fuel source of the body because they are converted into glycogen, which is stored in the muscles and liver, and is the primary source of fuel during intense exercise. When you restrict carbohydrate intake, your body's glycogen stores drop, and studies show at this point genetic signaling related to post-workout muscle repair and growth is inhibited. On a hormonal level, restricting carbs also raises your cortisol and lowers your testosterone which further inhibits your body's ability to recover from challenging workouts which is when muscle tissue is built. When you don't have the fuel necessary, you can't progressively overload your muscles and therefore maximum muscle protein synthesis is never achieved...that means muscles can't grow.

In order to really figure out how much fuel you need, you have to figure out where you are at now as a maintenance number, make sure you are getting enough protein, and then add 10-15% in the form of carbohydrates around your workouts. To figure out how many calories in the form of protein and carbohydrates you need, you have to measure them somehow. There are varying degrees of accuracy in terms of measuring and for our purposes today we are going to be as accurate as possible. This means using a food scale and an app that allows you to track the actual grams of protein, carbs and fat. The easy and cheap app is MyFitnessPal but there are several apps that can work for this purpose. Here are the steps you need to follow for 5-7 days to really know what you are currently eating.



- 1. Weigh and measure everything you would normally eat in grams OR ounces and enter it in MyFitnessPal.
- 2. After 5-7 days look at your diary on a daily basis and write those numbers down in 4 columns on a piece of paper.
- 3. You want a column for total calories, protein, carbohydrates, and fat.
- 4. Add all the numbers up in each column and divide each one by the number of days you tracked.
- 5. This is your daily average of total daily calories, protein, carbohydrates, and fat. Now, you need to have a couple things in place with your nutrition to gain muscle. If you have been gaining weight, keep your calories where they are at, if you have been maintaining your weight, add 6-10% to your calorie total in the form of carbs.
 - 1. You need to be eating 0.9-1 gram of protein per pound of body weight in protein.
 - 2. If you are a 175 pound person, that would be 157-175 grams of protein.
 - 3. The exception to this rule is if you are trying to lose weight. Then go off this multiplier at your goal weight. So if you are trying to lose 50lbs, from 225 to 175, it would still be 157-175 grams of protein.

Fats will fall into place with regard to your calorie budget after protein and carbs have been fulfilled.

Nutrient timing doesn't matter unless it affects hitting your numbers on a daily basis, but having said that, having some carbs and protein in your system when you workout and within an hour of working out will help recovery and soreness.

PART III HOW TO GROW YOUR MUSCLES

The repair process your body undergoes from the stress and damage of lifting weights is what causes the muscle to grow. Muscle protein synthesis is the process of your body turning protein into muscle or protein turnover. This is usually balanced with breakdown (catabolism) and synthesis (creation or anabolism) on a day to day basis and that is why a non-exercising person doesn't gain or lose muscle at an accelerated rate. BUT when you resistance train your body kicks muscle protein synthesis into high gear and when you do the right things between weightlifting sessions, BAM you start building muscle. This all happens from the stressful event of lifting weights not during weight lifting.

Therefore, if you want to gain muscle as effectively as possible, then you want to do everything you can to keep protein synthesis rates above breakdown rates. The more time your body spends in this anabolic (creation) state, the faster you gain muscle.



So what is the magic formula to recovering completely from exercise and maximizing muscle growth?

There are two major factors with the first one being sleep.

Maybe it's a surprise to you but sleep plays a vital role in this process because much of what your body does to recuperate and rebuild from the daily stresses of your life, happens in bed. This is why studies that show sleep deprivation directly inhibits muscle growth and fat loss AND can even cause muscle loss long-term.

To really compound the importance of sleep these negative effects become even more pronounced when you're in a calorie deficit. Even a single night's sleep can interfere with your performance not only in the gym but in life. Two nights is enough to erase any benefits of exercise all together.

Sleep quality, amount and consistency play a huge role in how much muscle you can build. When we sleep our brain "cleans" itself which allows us to not only "wire in" motor patterns like your squatting form but it also signals the body through hormones to repair tissue and build it back stronger, bigger and more resilient from your workout. However this doesn't happen with just any type of sleep. It only happens in certain stages of your sleep called REM and deep sleep. These stages can be elusive if you don't have good sleep hygiene. That means a good wind down routine that limits stimulation from lights and caffeine in the evening, as well as sticking to a relatively consistent sleep schedule. If you go to bed at 10:00 during the week and 1:00am on the weekends, you will struggle to have good quality sleep and build muscle. To get better at sleeping you need to know what your sleep is like right now. That means tracking your sleep. You can go low tech by using a notebook and writing down when you went to bed and when you got up as well as your subjective quality of sleep OR you can use one of the many sleep trackers like Oura ring or Whoop. These devices will give you all kinds of information about your sleep including time spent in each stage of sleep, length, quality, and consistency. I have used an Oura ring for several years and believe it's the most accurate device for measuring your sleep.



The next major factor in building muscle is Hormone balance. The total stress on your body, physical, mental and emotional, and how you "deal with it" is critical to building muscle. If your stress hormone cortisol is too high at the wrong times of the day, your body won't be able to build muscle. Cortisol is a catabolic hormone, so it breaks down tissue and fat. That is great, but too much cortisol and your efforts in the gym will be wiped away because of your lack of hormone balance. If you are relying on energy drinks and sleep aids, you need to figure out how to manage your stress. This means you have to figure out what the best stress reduction practices are for you so you can balance your hormones and get good sleep. Maybe that is emptying your thoughts in a journal at night time or cuddling with your spouse (or dog). Maybe it's meditation or stretching. Bottom line is to figure out what works for you and make it a standard practice to maximize all your other efforts to build muscle and improve your body composition.

You could spend hundreds of hours studying muscle growth and the human physiology behind effectively growing muscle but you would still barely scratch the surface. Fortunately, you don't need to understand all these physiological processes when it comes to improving your strength, building muscle, and improving your overall muscle tone/body composition. All you need to know is stress, nutrients, recovery, adaptation = muscle growth. That is all driven by Consistency, both in what you are doing at the gym but more so in your habits, your routines and your lifestyle. That is what brings everything together. We function in these daily rhythms and that is what our bodies thrive on. Consistent sleep patterns, consistent eating patterns, exercise patterns and maybe most importantly, consistent stress relief practices. It's a lot to figure out and honestly, most people can't do it by themselves. With all my individual clients, I take all the thinking out of it for them. We dial in their nutrition, build the habit of working out, and then systematically and progressively build muscle while they drop body fat. Gaining 10-20 pounds of muscle and getting your body fat percentage down around 20% will make you a fat burning machine, improve all your health markers and give you endless energy. If you want these results, let's talk. It's a free conversation about the most important person, YOU! No obligations, just a conversation about where you are at, how you got there and where you want to go with your health and life.

Now get out there and start building muscle!

Live Well, Love Life! ~Coach Brant