

How to Gain Muscle, No Matter Who You Are

Muscle growth takes time, persistence, and a long-term commitment to the process. But it's possible for most people with proper training programs and protein consumption.

Muscle building is often a top priority when it comes to physique improvements.

Added muscle mass will increase the definition of your muscles, improve your lean body mass, and add bulk and size to your frame in all the right places.

The basics of building muscle

Anatomically, skeletal muscles are a series of parallel cylindrical fibers that contract to produce force. This muscle contraction allows all external human movement to occur. Your body is constantly renewing and recycling the amino acids, or protein building blocks, in your muscles. You'll lose muscle mass if your body removes more protein than it adds. No measurable change in muscle size occurs if the net protein synthesis is even. Your muscles will grow if your body deposits more protein than it removes. The key to building muscle is to increase the protein deposition rate while minimizing the muscle protein breakdown rate. This process of increasing your muscle mass is known as muscle hypertrophy, and it's a primary goal of resistance training. Several factors drive the muscle-building process, including hormones like testosterone and growth hormone and the availability of amino acids and other nutrients.

To build new muscle tissue, your primary tools for increasing your body's rate of protein synthesis are performing resistance training and getting sufficient amounts of protein and overall nutrients. The correct amount of resistance training drives your body's hormonal response toward building muscle, but it requires sufficient protein and energy availability to ensure the process results in muscle gains as opposed to muscle losses, research says. While researchers and experts continue to study the science of optimizing muscle gains, performing resistance training using moderate to heavy loads combined with relatively high protein intake remains the only tried-and-true training method for increasing muscle mass.

Building muscle requires your body to deposit more protein molecules into your muscles than it removes. Resistance training with weights and ensuring proper nutrition are the primary means for accomplishing this goal.

Tips for how to gain muscle

While many types of exercise offer health benefits, the only reliable way to drive muscle growth is to use your muscles against moderate to heavy resistance. In addition, muscle growth is specific to the muscles being used.

1. Decide your target number of repetitions

The repetition continuum is a useful concept when designing training programs for muscle building. Stimulating muscle growth requires performing weight training exercises with an amount of weight that typically only allows you to perform 1–20 repetitions. In general, the repetition continuum states that weights you can only lift for 1–5 repetitions tend to build more strength, weights you can lift for 8–12 repetitions tend to build more muscle, and weights you can lift more than 15 times tend to increase muscular endurance.

Rep-range continuum

How many reps you can perform at a given weight determines the benefit you will see.

1–5 reps: develops more strength

8–12 reps: develops more muscle growth

15+ reps: develops more muscular endurance

Understand that these ranges will have some crossover, meaning that 3 repetition sets with the respective weight will cause some muscle growth, 8 repetition sets will build some strength, and 20-repetition sets will build muscle as well. Additionally, recent research suggests that different individuals may respond better to lower or higher repetition ranges when it comes to building muscle. To put it simply, depending on your size, your muscles may grow more with lower reps using heavy weights or with high reps using lighter weights

2. Choose the right amount of weight

Typically, the weight must be heavy enough that performing much more than 20 reps is impossible. The weight you choose to use should leave you at or near failure on your specified number of repetitions. For example, if you're performing a set of 10 repetitions, by the tenth repetition, you should be unable or nearly unable to perform another repetition. You should rarely have more than “two reps in the tank” by the end of a set if your goal is building muscle. The overall implication of the repetition range continuum is that you should go through different phases of training using different repetition ranges to see what gives your body the most muscle growth.

3. Choose your exercises well

As mentioned, muscle building is specific to the muscle being worked. For example, to build bigger biceps, you need to perform exercises that work the biceps. This could be an isolated bicep exercise, such as a bicep curl, or a compound movement that uses the biceps, such as a pullup. Compound and isolation movements can be equally effective at leading to muscle hypertrophy in terms of the best exercise type for muscle building. Nevertheless, your training should include compound and isolation movements for the best long-term fitness results. Compound movements like a barbell back squat effectively stimulate multiple large muscle

groups in a single exercise and provide more functional movement for real-life activities. This leads to both more efficient workouts and more practical muscle strength.

Isolation movements are an excellent way to target specific muscles, and beginners may initially find them safer and easier to learn than compound movements. Additionally, isolation movements are typically easier to perform when you're fatigued, as you're not stabilizing your entire body. This may allow you a few extra targeted sets at the end of a workout when you're otherwise too exhausted to do another compound exercise.

4. Structure your workout to avoid overtraining

A good rule of thumb is to perform 3 sets of 3–5 compound movements, followed by 3 sets of 1–2 isolation movements per workout. Generally, you do your heaviest sets using compound movements and perform higher repetition ranges on your isolation movements. Assuming you're performing 3 working sets per exercise, limit your total combined compound and isolation movement exercises to 5–7 movements per workout. This allows you to benefit from each type of exercise while maximizing the overall muscle-building potential of your training program and avoiding any symptoms of overtraining.

Gaining muscle is possible using all repetition ranges, and some people may respond better to lower or higher repetitions with heavier or lighter weights, respectively. Include compound and isolation movements in your program.

How to eat to gain muscle

Your diet is the second half of the muscle-building equation. All the weight training in the world will not yield results if you don't supply your body with the nutrients it needs to grow new muscle tissue.

Bulking vs. cutting

Most athletes, bodybuilders, and serious muscle-growing enthusiasts follow some variation of a bulking and cutting cycle. Bulking periods refer to training phases during which you eat more calories than you burn to support muscle growth. On the other hand, cutting refers to a period of restricting calories to reduce body fat, all while eating and training enough to avoid losing muscle. To gain muscle, you need to provide your body with appropriate amounts of calories and nutrients, particularly protein. Doing so will support the creation of new muscle proteins from the dietary protein you eat, which will be stimulated by the work you do in the weight room. The main goal of eating to gain muscle during a bulking phase is supplying your body with enough nutrients to grow but not so many calories that you put on more fat than muscle. While some minor fat gains tend to occur during periods of bulking, a sweet spot, where your body builds muscle but does not store large quantities of fat, tends to occur when you eat 300–500 surplus calories. Your body has a maximum muscle-building rate, and beyond that limit, excess

calories will be stored as fat. If your goal is to have defined muscles, you want to avoid gaining too much body fat.

Calories needed to gain muscle

You want to eat 300–500 calories per day above your baseline needs for sustainable muscle gain without excess fat gain. Many factors affect your baseline calorie needs, also known as your total daily energy expenditure, or TDEE. These factors include your:

- age
- sex
- current lean body mass
- physical activity
- occupation
- underlying medical conditions

Your best bet is to use an online calculator to estimate your calorie expenditure based on the data you input. Once you have this baseline expenditure, add 300 calories to establish your daily calorie goal.

Protein is needed to gain muscle

Protein is the top priority when it comes to nutrients for building muscle. Research suggests that those training to gain muscle should eat 1.4–2 grams of protein per kg of body weight per day. When it comes to choosing what foods to eat, a registered dietitian can advise you specifically. Nevertheless, eating a variety of protein sources is probably your best bet. Good sources of protein to eat for muscle gain include:

- lean cuts of meat
- low-fat dairy
- fish
- Eggs
- nuts
- plant protein sources, including:
 - pea protein
 - soy protein
 - hemp protein

Carbs and fat needed to gain muscle

The recommendations for carb and fat intake are more varied. Dietary fat is needed to ensure optimal hormone functioning. Recent bodybuilding research suggests consuming 0.22–0.68 grams of fat per pound (0.5–1.5 grams per kg) of body weight per day. If you tend to prefer

fattier foods, start on the higher end of that range and adjust from there. The rest of your daily calories should come from various carb sources.

How many grams of carbs do I need to not exceed my daily calorie intake?

Multiply your daily protein goal (in grams) by 4 and your daily fat intake goal by 9, as protein has 4 calories per gram and fat has 9 calories per gram.

Subtract this number from your calculated daily energy need, and divide it by 4 (the number of calories in a gram of carbohydrate).

In the long run, getting a consistent protein intake and ensuring you don't exceed 500 surplus calories per day are key to gaining muscle without putting on too much excess fat.

Eating for muscle gain requires sufficient protein and calorie intake to drive growth. Avoid eating more than 300–500 extra calories per day to minimize gains in body fat.

How fast can you gain muscle?

Gaining muscle isn't always easy — and it certainly doesn't happen quickly. Gaining serious muscle takes many months and years of weight training and proper eating. Muscle gain rates vary by individual, even when following the same program. Overall, with good nutrition and consistent training, 2020 research has found that 0.5–2 pounds (0.25–0.9 kg) of muscle growth per month is a good benchmark for maximal potential muscle growth in adult men. While this may seem like a small amount, the results can be dramatic over time. With just a few years of consistent training, you can gain 20–40 pounds (9–18 kg) of muscle, which would be a dramatic physique change for virtually anyone beginning a resistance training program.

Gaining muscle takes time and is limited to 0.5–2 pounds (0.25–0.9 kg) per month in adult males.

Gaining muscle requires a commitment to both resistance training and following an appropriate diet. Workout programs for building muscle should primarily rely on compound and isolation movements with weights but adjust the specific exercises, sets, and repetitions to ensure consistent, long-term gains in both muscle size and strength. Proper nutrition involves sufficient protein, fat, and carbohydrate calorie intake that exceeds daily energy expenditure enough to build muscle but not so drastically as to cause excess fat gain. Large increases in muscle mass take months to years of consistent training but are possible for most individuals. Overall, to reach your muscle-building goals, you must lift hard, eat right, and stay consistent.