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## How Fast Should You Gain Weight When Bulking?

How fast should you aim to gain weight? That will ultimately depend on how long you'd like to bulk for, and your degree of comfort with gaining fat as you gain weight. This article and bulking calculator will help guide your decision making.





by Greg Nuckols • October 14, 2024 • Articles, Exploring Bulking and Cutting



The <u>first article</u> in this three-part series addressed the question of whether you should bulk or cut, this one discusses the rate at which you should aim to gain weight (including a free bulking calculator to make it easy for you), and the <u>final article</u> discusses the rate at which you should aim to lose weight.

Ultimately, there are pros and cons associated with both fast and slow rates of weight gain. Faster rates of weight gain might help you build muscle a *little* faster, but you'll gain considerably more fat in the process, meaning you'll likely want (or need) to cut again sooner. Conversely, slower rates of weight gain might mean that you're not absolutely maximizing your rate of muscle growth on a week-to-week basis.

At the end of the day, the decision is up to you, but we tend to think that more gradual rates of weight gain are preferable for most people, most of the time. So, let's dive in.

Looking for a quick answer? Check out our free Bulking Calculator below.



# How fast should you bulk?

Calculate your optimal bulking rate, based on your training experience and body composition preferences

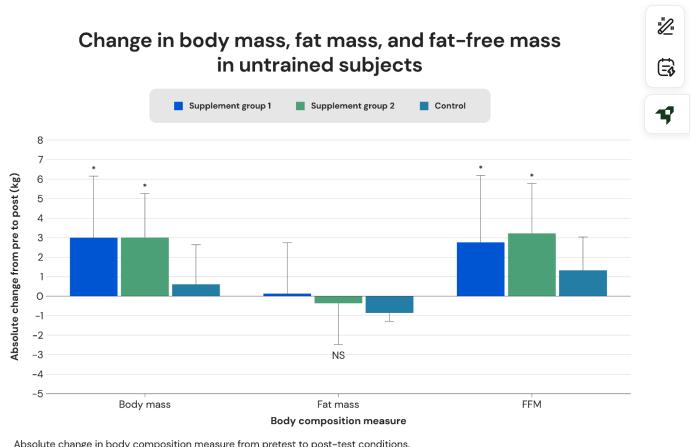


## An overview of the controlled research on bulking

Assuming your goal is to maximize muscle growth while minimizing fat gain, optimal rates of weight gain are heavily influenced by your level of resistance training experience.

For instance, a <u>classic study by Rozenek and colleagues</u> using (essentially) untrained subjects found that relatively fast rates of weight gain resulted in very rapid gains in fat-free mass, with minimal changes in body fat. Subjects lifted weights four days per week for eight weeks. One group just lifted weights without any intentional change to their diets, while two

other groups used supplemental energy-dense beverages to increase energy intake. All three groups had great results: the group of subjects that didn't intentionally change their diets gained about 0.6kg of body mass, lost about 0.8kg of fat, and gained about 1.4kg of fat-free mass in eight weeks. Meanwhile, the two groups using the high-calorie supplemental drinks gained about 3kg of body mass, 3kg of fat-free mass, and didn't gain or lose any meaningful amount of fat.



Absolute change in body composition measure from pretest to post-test conditions.

From Rozenek et al (2002)

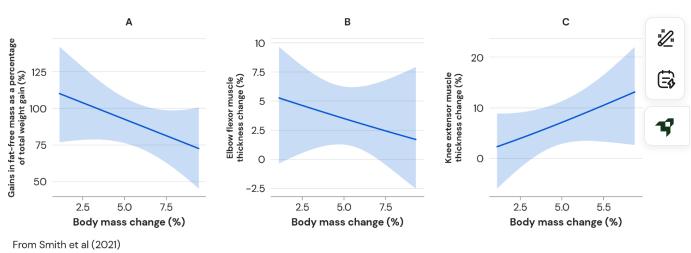
Next, we have a study by Smith and colleagues. In this study, subjects had at least six months of training experience, but they were still (relatively) untrained enough for their bench press strength to increase by 12.5%, and their leg press strength to increase by 37.2% in just six weeks. Rather than split things out by group, the researchers used regression analysis to detail how much fat-free mass was gained in relation to total gains in body mass. They found that, when gaining less than ~0.55% of body weight per week (about 0.4kg per week), subjects experienced body recomposition, on average (simultaneously gaining fatfree mass while losing fat mass). But as rates of body weight gain increased, more and more

<sup>-</sup> significantly different from control group (p≤0.05).

NS - significant difference among groups (p≥0.05).

fat was gained, relative to gains in fat-free mass. Furthermore, rates of weight gain were only weakly associated with gains in elbow flexor and knee extensor thickness (and the association was actually negative for elbow flexor thickness).

# Impact of rate of weight gain on relative rates of hypertrophy over 6 weeks



Next, we have a study by Helms and colleagues. The subjects in this study had a higher level of training experience than the subjects in the Smith study (over eight weeks of training, bench press and squat strength only increased by about 5–5.5%). The subjects were divided into three groups, and were either instructed to a) eat at energetic maintenance, b) pursue a very small energy surplus (aiming to increase their body weight by about 1% per month), or c) pursue a larger energy surplus (aiming to increase their body weight by about 3% per month). To account for subjects' actual rate of weight gain differing from researchers' recommendations, regression analysis was used to see whether faster rates of weight gain were predictive of enhanced muscle growth and/or greater fat accumulation. Ultimately, faster rates of weight gain were unrelated to rates of muscle growth for the quads and triceps (R<sup>2</sup> = 0–0.08), and only weakly related to rates of biceps growth (R<sup>2</sup> = 0.24). However, faster rates of weight gain were much more strongly predictive of rates of fat accumulation (R<sup>2</sup> = 0.49). So, faster rates of weight gain didn't seem to significantly increase muscle growth, but they *did* lead to more fat gain.

Next, we have a study by Sanchez and colleagues. The subjects in this study were a mixed group of men and women who were "involved in sport, military, or training at the

recreational, collegiate, or elite level." But, their rate of strength gain suggests that their average level of training experience was somewhere between the subjects in the Smith study and the Helms study (Bench press and squat strength increased by about 10% in 10 weeks). There were two groups of subjects in this study, and they gained weight at slightly different rates (0.16 vs. 0.27kg per week), but the ratio of fat-to-lean mass gained was similar in both groups. The group gaining weight faster gained about 70% lean mass and 30% fat mass, while the group gaining weight slower gained about 75% lean mass and 25% fat mass. So, this study suggests that that, in this population, gaining weight at a rate of 0.24–0.38% of body weight per week results in gaining about 70–75% lean mass and 25–30% fat mass.







# Body composition of participants assigned to the PNT and CHO snack groups (N=32)

Body composition	Group	BSL	3-wk	7-wk	Post
TBM (kg)	PNT	67.7 ± 12.7	68.5 ± 12.3	69.5 ± 12.5	69.3 ± 12.5
IDM (Kg)	СНО	70.4 ± 10.1	71.6 ± 9.8	72.6 ± 10.2	73.1 ± 9.8
LBM (kg)	PNT	49.9 ± 11.0	50.7 ± 10.6	51.4 ± 11.0	51.2 ± 10.8
LDM (Kg)	СНО	53.2 ± 10.2	54.3 ± 9.9	54.9 ± 10.2	55.1 ± 9.9
FM (kg)	PNT	15.0 ± 4.3	15.0 ± 4.5	15.3 ± 4.4	15.4 ± 4.5
LM (KR)	СНО	14.2 ± 4.4	14.4 ± 4.5	14.8 ± 4.6	15.1 ± 4.6
Body fat (%)	PNT	23.5 ± 6.2	23.2 ± 6.2	23.3 ± 6.3	23.4 ± 6.2
body lat (70)	СНО	21.4 ± 7.1	21.1 ± 7.0	21.6 ± 7.0	21.7 ± 7.0

Data reported as mean±SD.

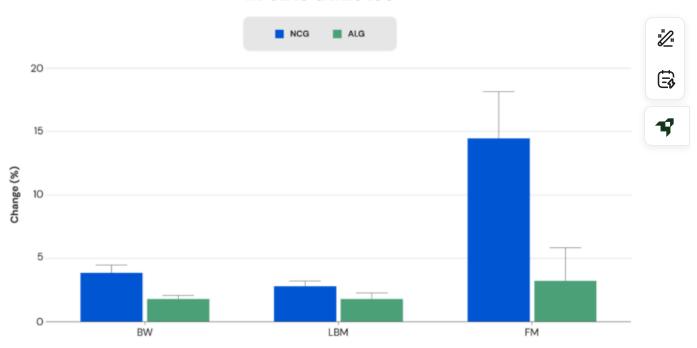
PNT - peanut, CHO - carbohydrate, BSL - baseline, TBM - total body mass, LBM - lean body mass, FM - fat mass.

From Sanchez et al (2024)

Finally, we have a classic study by Garthe and colleagues. In this study, elite athletes (people who competed for the Norwegian national team in various sports) either gained weight with a self-directed diet, or they gained weight using the dietary advice of sports nutritionists. The self-directed group ate a bit less protein (1.7g/kg vs. 2.4g/kg) and gained weight a bit slower (0.12kg per week vs. 0.27kg per week, or 0.16% vs. 0.38% of body mass per week) than the group given nutrition counseling. Gains in lean mass didn't differ significantly between groups (1.2 vs. 1.7kg). Furthermore, while neither group gained a *ton* of fat, the group gaining weight faster put on about 5 times as much fat (1.1kg vs. 0.2kg) over the 8-12 week duration of the study. Thus, a faster rate of weight gain only *slightly* increased the rate of lean mass accretion, but it *did* lead to considerably more fat gain. Gaining weight at a rate of 0.16% of

body weight per week resulted in gaining about 85% lean mass and 15% fat mass, while gaining weight at a rate of 0.38% of body weight per week resulted in gaining about 65% lean mass and 35% fat mass

# Impact of rate of weight gain on body composition changes in elite athletes



Changes in body weight (BW), fat mass (FM), and lean body mass (LBM) in the nutritional counseling group (NCG) and the ad libitum group (ALG). Data are presented as mean±SE.

From Garthe et al (2013)

So, what we see from these five studies is that relatively fast rates of weight gain – up to around 0.4kg or 0.5% of body weight per week – lead to large increases in fat-free mass and little-to-no increase in fat mass (on average) in people with relatively low levels of training experience. Past this point, the <u>study by Smith and colleagues</u> suggests that rates of fat gain begin increasing.

For subjects with more training experience – like those in the Helms and Garthe studies – gaining weight faster seems to *primarily* just increase the rate at which you gain fat. Both studies *did* suggest that faster rates of weight gain *may* increase muscle growth a little bit. In the Garthe study, faster rates of weight gain *did* result in non-significantly larger increases in fat-free mass, and in the Helms study, faster rates of weight gain didn't increase quadriceps or triceps growth, but they did *slightly* increase rates of biceps growth.

However, these studies also suggested that gaining weight faster *primarily* just increased rates of fat gain. In the Garthe study, for instance, gaining weight at a rate of 0.38% of body mass per week resulted in about 60–65% of the weight gained being fat–free mass, and about 30–35% of the weight gained being fat mass, versus gaining (on average) 85% fat–free mass when gaining weight at a rate of 0.16% of body weight per week. The <u>Sanchez study</u> corroborates these results – gaining weight at a rate of about 0.24–0.38% of body weight per week meant gaining about 70–75% lean mass and 25–30% fat mass.

## Recommended rate of weight gain for bulking

<u>"</u>"

So, how fast should you aim to gain weight? That will ultimately depend on how long you'd like to bulk for, and your degree of comfort with gaining fat as you gain weight. The table below (and the bulking calculator at the top of the page) can help guide your decision making; here's how to interpret it:



**Conservative:** this is the quintessential "lean bulk." You likely won't absolutely maximize your rate of muscle growth, but you should experience little-to-no fat gain, and you might even experience some degree of body recomposition (especially if you're a beginner-to-intermediate lifter).

**Happy medium:** this would be our "in a vacuum" recommendation. You should come close to maximizing your rate of muscle growth, fat gain should still be minimal (around 2/3rds-3/4ths of the weight you gain should be fat-free mass), and you should be able to stay in a surplus and keep building muscle for an extended period of time before you feel the need to cut again.

**Aggressive:** this is the point at which you can be very confident you're not leaving any short-term muscle growth on the table, but you'll likely gain quite a bit more fat, and not be able to bulk for nearly as long. This is about as fast as most people should consider bulking.

**Extremely aggressive:** if you want to completely ensure you're not leaving an ounce of muscle growth on the table, and you're comfortable with gaining at least 50% fat as you bulk, you could select this option.

**Beginner:** you're able to add weight to the bar every workout. Your strength in most exercises is increasing by at least 2% per week. This applies to very few people with more than about 3-6 months of serious training experience.

Intermediate: you're able to add weight to the bar most workouts. Your strength in most exercises is increasing by around 1% per week (in other words, if your rate of progress continued, you'd confidently expect to be lifting 50% heavier weights within the next year). This applies to very few people with more than about a year of serious training experience



**Experienced:** strength gains have slowed down to well below 1% per week. If the weights you were lifting were 25% heavier at this time next year, you'd be thrilled. This applies to most people with at least 1–2 years of serious training experience.





Recommended	rates of bulking (p	ercentage of bod	y weight per wee	k)
	Conservative	Happy Medium	Aggressive	Very Aggressive
Beginner	0.2%	0.5%	0.8%	1%
Intermediate	O.15%	0.325%	O.575%	0.8%
Experienced	O.1%	O.15%	O.35%	0.6%

It's also worth noting that body weight-based scaling doesn't work indefinitely. 0.5% of body weight for someone who weighs 50kg and someone who weighs 150kg amounts to very large differences in total weight gain, and the person who weighs 150kg likely isn't capable of gaining muscle at three times the rate of the person who weighs 50kg. So, these are reasonable caps, in terms of total pounds or kilograms of body weight per week.

Recommended	maximal rates of k	oulking (kilograms	per week)	)		
	Conservative	Happy Medium	Aggressive	Very Aggressive		
Beginner	0.16	0.4	0.64	0.8		
Intermediate	0.12	0.26	0.46	0.64		

Experienced	0.08	0.12	0.28	0.48	

Recommended	ecommended <i>maximal</i> rates of bulking (pounds per week)			
	Conservative	Happy Medium	Aggressive	Very Aggressive
Beginner	0.33	0.88	1.41	1.76
Intermediate	0.26	0.57	1.01	1.41
Experienced	O.18	0.26	0.62	1.06
	•		•	

As you bulk, be sure to monitor your rate of strength gains in the gym. If your rate of progress noticeably slows down, that suggests that your rate of muscle growth is likely slowing down as well, and it may be wise to reduce your target rate of weight gain. Furthermore, as mentioned in the <u>first article in this series</u>, if you have a goal of maximizing your total muscle growth long-term, we think it's advisable to spend as much time as possible in neutral-to-positive energy balance. So, when in doubt, we'd typically recommend opting for rates of weight gain in the "Conservative" to "Happy Medium" range. Furthermore, if you think you might be gaining fat faster than you'd prefer, we'd generally recommend reducing your target rate of weight gain, rather than sticking with a faster rate of weight gain and just planning to shift back into a cut sooner. If you gain muscle 10–20% slower, but you're able to spend twice as long bulking before you need to cut again, you'll come out ahead in the long run.

## Why we updated our bulking recommendations

The rates of weight gain in the table and the bulking calculator reflect the bulking recommendations you'll now find when setting up a new weight gain goal in MacroFactor. These recommended rates of weight gain (specifically for beginner and intermediate lifters) are considerably faster than our prior recommendations. The main reason for this change is that the amount of research on bulking has increased by 150% since we were initially formulating our recommendations (in that there were previously two controlled studies on the topic, and now there are five).

As mentioned previously, we *do* still think it's preferable for most people to err on the "slow and steady" side of things when bulking – you'll likely get a lot further by staying in a small surplus for 2 years than by hammering an aggressive surplus for a few months before feeling the need to cut again. So, when there were just two studies looking at the effects of different rates of weight gain on body composition outcomes (one in totally untrained lifters, and one in international-level athletes – none in "normal" lifters with sub-elite levels of training experience), we thought it best to keep our recommendations fairly conservative.

However, we continuously monitor the research to ensure that our recommendations refle the best available evidence, and we deemed that there's now sufficient evidence to conclude that beginner and intermediate lifters *can* achieve faster rates of muscle growth while still minimizing fat gain, with rates of weight gain that are a fair bit faster than our prior recommendations.

So, that wraps up this article. But bulks don't last forever. In the final article of this three-part series, we cover how quickly you should aim to lose weight on a cut. That article includes a cutting calculator similar to this article's bulking calculator.

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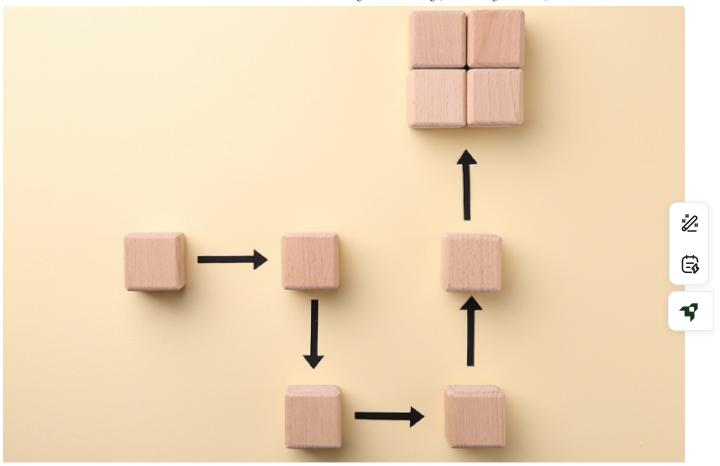
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