

Basic Dieting and Training

Muscle mass is the straw that stirs the drink in the sport of bodybuilding. Talk all you want about symmetry, shape and definition, but in the final analysis, muscle mass is the defining element of a physique. The mass building equation has three components: a correct diet strategy, hardcore training and high tech supplementation. It's not rocket science, but there are tricks to it, nonetheless.

To save you time and trouble, I've compiled 10 tips to jump start anabolism and create a positive nitrogen balance - to pack on muscle mass, you need to take in more nitrogen via protein and training than you excrete through the natural metabolic process.



1. Emphasize the negative

Muscle growth is the logical byproduct of muscle contraction. Much emphasis is placed on the concentric phase of a lift where the muscle shortens as it contracts. But the stretching of the muscle during the eccentric, or negative, phase where the muscle lengthens while maintaining tension can directly cause muscle hypertrophy, too. Emphasizing the negative is an easy technique to overload muscles and promote radical gains in mass.

2. Eat fish

Fish containing higher amounts of fat - salmon, for instance - provide us with the ever popular omega-3 fatty acids. Why is this important? The omega-3s make the muscle more sensitive to insulin; hence, they fuel glycogen storage and amino acid entry into muscles while also preserving glutamine stores.

3. Increase sodium intake

I'm not kidding. Sodium is an essential mineral that is an absolute must for muscle growth. Sodium has a bad rap because it can cause water retention - anathema to contest ready bodybuilders. On the plus side, sodium enhances carbohydrate storage and amino acid absorption while also improving the muscle's responsiveness to insulin.

4. Stop all aerobics

Aerobic exercise has a detrimental effect on mass building. Aerobics interfere with strength gains and recovery while burning up valuable glycogen and branched chain amino acids (BCAA). Adding mass is the best way to upgrade your resting metabolic rate (RMR); is the RMR is elevated, more calories are burned and it is easier to stay lean.

5. Lift explosively

The amount of force a muscle generates is proportional to the amount of muscle growth you'll be able to create. Force is defined as mass (the weight you use) multiplied by acceleration (the speed at which you push a weight against resistance). To generate more force, then, progressively increase your poundage while lifting explosively - in this context, you actually increase speed during the second half of the rep.

6. Dramatically increase your calories for three days

You will never achieve a positive nitrogen balance with a low calorie diet. It takes raw materials - carbs, protein and fats - to build new muscle mass and support recovery. Increasing your calories by 50% (from 3,000 to 4,500 per day, for instance) for three days can spur growth while adding little if any body fat. The key is to limit the increased calories to a designated three day period; you'll be able to stimulate growth by improving muscle sensitivity to insulin and by providing more carbs for glycogen storage. If you are in an overstrained state - and if you're not gaining any new muscle mass, this is probably the case - the additional calories will promote anabolism before fat storage is able to kick in. That's why you want to limit the 50% increase to a three day period. After that time, return to your typical intake of daily calories; you'll have stimulated new growth without adding unwanted fat.

7. Rest

Many bodybuilders are unable to pack on mass because they are always training and, therefore, always recovering from those grueling workouts. Taking a couple of days off can restore glycogen, increase anabolism and allow hormonal indexes such as testosterone and cortisol to return to optimal levels.

8. Eat in the middle of the night

Anabolism depends on an excess of calories. As you are well aware, bodybuilders eat four to six times per day to increase the absorption of nutrients and to provide a steady influx of carbs, protein and fat. Expanding on the four to six meals per day plan is to include a protein drink in the middle of the night that can encourage additional growth. Glutamine EFX, providing 30 grams of protein and carbs along with the 'big three' (see tip #10), is a good option for this late at night infusion of nutrients.

9. Increase strength through powerlifting

Your muscles respond to training in three ways. When you train with high reps (more than 15), there is an increase in endurance with no substantive improvement in size or strength. The six to twelve rep range - the range that all big bodybuilders rely on - promotes an increase in both size and strength. Powerlifters generally stay with low reps, two to four per set, which supplements strength with slight variances in size. However, if you set aside one week of training to pile on the weights with low reps the subsequent improvement in strength will make you stronger when you return to the six to twelve rep routine. Here's the formula: More strength equals more tension on the muscle equals more growth.

10. Supplement with the big three: Glutamine, Creatine and BCAA

Glutamine is known as the immunity amino. If you are overly stressed from dieting or training, the immune system kicks in, releasing glutamine into the bloodstream. Having low levels of glutamine will inhibit muscle growth - that's why supplementing with glutamine is important.

Creatine is associate with added power and the ability to produce more adenosine triphosphate (ATP) - the chemical fuel source for training and growth. Supplementing with creatine allows bodybuilders to raise creatine levels in the muscle - therefore enhancing strength and ATP - without the unwanted fat that you'd be saddled with by getting all your creatine exclusively from food.

Branched chain amino acids act as a handy fuel source when glycogen stores are low. Adding BCAA to your nutritional program will increase your nitrogen balance while preventing the dreaded catabolic state that derives from over training or over dieting