

# Getting It Together

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The first thing I tell most people who are asking me for specific advice is that in order for supplements to work you have to have your other ducks in a row.

Unlike the use of drugs, where you can make gains in spite of your lifestyle, training and nutrition, if you don't have an integrated approach to everything else the supplements by themselves won't do much.

While again covering all the other factors is beyond the scope of this article, we'll touch on some of the factors, including genetics, lifestyle, training and diet, if just to put the nutritional supplements in context.

## Genetics

It's obvious that in order to excel in any sport or to develop extensive muscularity you have to be born with the potential to do so. And this potential the mental as well as the physical side. Enthusiasm, dedication, fortitude and drive are just as important to ultimate success as the physical attributes.

While those that are on top, such as elite athletes, have a genetic head start, what they accomplished depends on the other factors. It's the environment that shapes the flow of genotype to phenotype. In other words, even the truly gifted have to have their potential molded and developed by the right factors.

All four environmental factors, lifestyle, training, diet and nutritional supplements must be in synch before you can reach, and sometimes even exceed, the upper limits of your natural genetic potential.

## The Usual Suspects – Lifestyle, Training, Diet and Nutritional Supplements

### The Performance and Body Composition Enhancement Pipeline

Effort is a combination of enthusiasm, motivation, genetic ability, etc. It makes up the physiological and psychological foundation for success in sports and in life. But it's not enough to give us the strength, body composition and performance results we want. For that we have to optimize our lifestyle, training, diet and nutritional supplement use.



If everything is in synch then we'll achieve our goals, as long as they are realistic.



A weak section in the pipeline will decrease the end results.

Thus, reaching your performance and body composition goals takes a structured approach that looks at lifestyle, exercise, diet and nutritional supplements.

# Factors that maximize the Pipeline

## Lifestyle

In order to achieve maximum progress and make full use of any supplement, the bodybuilder first must bring his lifestyle under control. Reducing stress and dealing positively with any emotional difficulties in your life is a big factor here.

There's stress all around us including the escalating pollution, the many life stresses that's thrown on us as we live and even stress caused by overreaching and overtraining.

Besides affecting all of metabolism, stress can result in decreased levels of testosterone and increased cortisol levels in the body<sup>i</sup>. Testosterone, the hormone that stimulates sexual development and growth in males, helps to build muscle mass. Cortisol, secreted by the adrenal glands, breaks it down. It makes sense that, to go for optimum growth, you've got to have your life in order.

You need adequate sleep to grow. When training hard you should allow for a minimum of 8 to 9 hours a day. This can be done either straight through at night or with 7-8 hours at night supplemented by a short nap in the afternoon. Sleep deprivation adversely affects testicular function, and this leads to lower levels of serum testosterone in the body<sup>ii</sup>. This isn't good for building muscle mass since decreasing testosterone decreases the anabolic effect of exercise.

Recreational drug use must also be curtailed for maximum muscle gains and performance. Marijuana<sup>iii,iv</sup> and cocaine<sup>v,vi</sup> have been shown to decrease serum testosterone and so does alcohol<sup>vii,viii,ix</sup>. And though a social beer or two isn't going to do too much damage, any spree or chronic usage will. And even if abusing illicit drugs and alcohol didn't have any metabolic or hormonal adverse effects, it's likely that they would be disruptive for making meaningful gains in body composition or performance.

Nicotine is also used by some athletes in the belief that it will increase performance but there has, of yet, been little in the research to support such a claim. Smoking is especially harmful and, along with its many general health risks, it's been shown to have a negative effect on athletic performance<sup>x</sup>.

As for smokeless tobacco products, though better than cigarettes, you'd still be better to avoid them. While nicotine can aid in weight loss, it is highly addictive and dramatically increases the chances of oral cancer and other disease<sup>xi</sup>. It's hardly worth the risk for any small possible benefit it could provide.

## Training

In life, sometimes your greatest strength can also be the source of your biggest weakness. Exercise is like this. On the one hand, it's the most powerful and potent anabolic, muscle producing agent available to anyone who exercise and especially to competitive athletes and bodybuilders. On the other, it can be the most catabolic or muscle limiting.

It is important to train to the fullest extent of your abilities. Research has shown that testosterone and growth hormone increase as exercise intensity and duration escalate. However, exercising to the point of overtraining decreases the levels of testosterone and growth hormone while at the same time stimulating the release of cortisol, leading to the cellular breakdown of protein and, ultimately, muscle.

To maximize anabolic effects in muscle and the positive effects of performance supplements a short, intense approach to workouts is usually best for the bodybuilder. As discussed above, a workout session geared toward high intensity and limited to no more than 35-50 minutes seems wisest although allowances can be made for personal preference and training strategy.

And while all resistance programs result in some increase in testosterone and growth hormone it's been found that maximum natural production is achieved when training with moderately heavy weights for 6-8 rep sets with only limited rest allowed between sets. As mentioned above, if you're still doing those high volume, 2-hour marathon sessions in the gym, WAKE UP. Along with being inefficient, they may even be sabotaging your growth.

On the other hand, long workouts, even if handling maximum weights, can be productive as long as you give yourself enough time to fully recover between sessions. As an example, after trying just about everything, I found that I made the most progress in strength with heavy four hour training sessions every ten days and a relatively light training session every 5 days in between the ten-day sessions. That resulted in 2 sessions every ten days, which worked best for me as far as my powerlifting progress.

Again, it's important to stress that supplements don't work independently of other training factors. Lifestyle and the two components in "full capacity training" not directly affected by supplements (diet and training strategy) must also be at full capacity to optimize performance and growth.

Likewise, supplements must be targeted effectively to the needs of the bodybuilder and must also be taken at the right time and in the right dosages. Often in my experience it's been not the quality of the supplement but the way it was used that limited its effectiveness.

## **The Metabolic Diet**

The third component of the training solution is to determine the best diet that will give us the results we want in the shortest period of time and that will fit into the various training phases. In another article I'll be introducing my phase shift diets, including the Anabolic Diet, the Metabolic Diets, the Anabolic Solutions, and the Radical Diet (which is a low calorie monophasic ketogenic diet), new paradigms in dieting for those interested in enhancing body composition, increasing strength and athletic performance.

## **Nutritional Supplements**

Nutritional supplements are the fourth part of the training solution. Once you've got your lifestyle, training and diet in order, the next step is choosing and using the right nutritional supplements for the job at hand, depending on what phase of training you're in and your goals. Nutritional supplements can be the icing on the cake and can help you train more effectively, gain muscle mass and strength, and lose bodyfat.

The bottom line in your ability to get and maintain the body you want, and/or to increase performance requires a coordinated wholistic approach to lifestyle, training and nutrition. This approach affects not only the body, but also the mind, with important positive psychological and emotional stabilizing effects.

# References

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