

Genetic Potential and Exercise Choice

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Being a natural trainer is the smartest and most rewarding choice a lifter can make, the gains we make are REAL! We must though, pay close attention to recovery. In doing so, an abbreviated program is most often and wisely chosen. There are many programs available, all with strong proponents to back them up. But just how brief should a program be? Some proponents claim you will only EVER need 3 or 4 basic exercises to completely transform your physique. EVERY muscle will develop to it's fullest!

I do completely concur that some of us do have such limited recovery reserves that we must perform the absolute bare minimum in our programs. The only thing I would like to put forth, is that some of these programs, the ones which suggest only EVER using this small handful of exercises, will leave many muscles lacking in development.

The training is based on the contention, that if we reach our maximum strength on several core exercises, that we will also reach our genetic limits of size in ALL muscles involved in those exercises. Note: This article is not written to say we must include a large number of exercises, or construct workouts peppered with isolation exercises, but, it is to point out that we may not be able to reach our genetic limits in size, in ALL muscle groups, if too few exercises are used in the course of our training career.

If we fail to include at least some variance of exercises in routines, even though we are "using" all, or most all of our muscles, my contention is that some of these muscles may not be working to a hard enough intensity to illicit the maximum growth response. For example, some trainee's bone structure is such that the triceps are always the first to fail in the bench press. Now if this trainee uses the bench press as their ONLY pec/delt/triceps exercise, for most of their exercise career, and their bone structure is such as I just described, then, what will happen when the triceps reach their genetic size/strength development? Progress on the bench ceases, and since no poundage increases can be made, progress and size gains also cease for the pecs and the delts. Even though, much growth potential may still be available. Also, in this circumstance, since the triceps always were the dominant muscle group, or weak link, in the bench, the pecs and delts are most likely underdeveloped. This scenario would be even more evident in leg development. The squat is usually, and almost always chosen as THE quad building exercise. And it does deserve this reputation, although, when the muscle or group that IS the weak link in the squat, reaches it's limits, progress on the squat ceases, just as in the example of the bench press, and growth is halted in all other muscles in the thighs.

It has been scientifically proven that a larger muscle FIBER is also stronger, and visa-versa. So it stands to reason that by stimulating a muscle to grow stronger, it will also make it larger. I am sure that if you could actually remove a muscle, for example, the vastus medialis,

from several different people, the largest muscle would be the strongest. But this is where I believe the so called 'rub' is. We have all experienced or witnessed the following: Person "A" is able to squat 500 pounds, but their quads appear smaller in size than the quads of person "B", who can only squat 350! Since we know "A" has the same internal structure as "B", ie. muscle fibers, connective tissue, etc. , the only explanation (besides neurological efficiency) is that the quadriceps muscles of person "B" MUST be stronger, even though this strength does not translate synergistically to the squat exercise. This person might have included other forms of thigh training periodically, or their particular joint leverages are such that their quads received a higher workload when squatting. Person "A" might want to include leg extensions to offset the size/strength imbalance. For example, the function of the Vastus Medialis muscle, is to pull the patella towards the inside of the leg, keeping the "knee cap" on track and assisting with extension. This muscle only shows high activity in the last few degrees of thigh extension. This means, a basic squat will not provide complete stimulation for this muscle.

Another example of how this can easily be visualized is as this: Imagine that your biceps insertion tendon is fixed in such a way that you require huge poundages in the curl exercise to reach failure at 10 reps. Your program dictates that you perform chins as your only lat/bicep exercise. What will happen, is while performing the exercise, your lats will experience the brunt of the work since your biceps have such a huge mechanical leverage advantage. Years later, when the lats reach their genetic limits, your progress in the chin will come to a halt. At this point though, your biceps still have MUCH potential for growth remaining, which will never actualize if a specific exercise for the biceps is not chosen.

Conclusion

Basic exercises should always be the framework of our routines. Even though we can build a great deal of size and strength with programs including only, Squats, Dips and Deadlifts, (for example) performed 4-8 times a month, it may be wise to periodically cycle between exercises and include more compound movements and a few well chosen isolation exercises.