

***Be not afraid of growing slowly,***

***Be afraid only of standing still.***

*Chinese proverb*

A personal return on experience from over 30 years strength sports experience.

By Mark Notschaele

### Strength ? RAISE ! – By Mark Notschaele

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#### RESULTS and Expectations

What are realistic strength and muscle mass expectations when working out efficiently and effectively ? To make a point about real results, a short testimony statement about my twins boy sons Timo and Steffen. Starting at the age of 16, from a sport base of having played soccer for years and some running raining, they worked out from Sept 2012 to Oct 2013 using the basic RAISE principles, which are described in this article. In that year they gained 100% strength in main movements like benchpress, squat and deadlift and gained 9 kg of lean bodyweight – resulting in an overall muscular and athletic look, way beyond the average in their age group.

This achievement and look now leads to comments at their school that this is “not normal”, “to much for 16” and general disbelief this has been done drug free. And I must admit that indeed it is “not normal”. The “norm” is following regular fitness routines, usually very far away from adhering to the RAISE principles and as such not effective and efficient when it comes to producing strength and muscle mass development results.

Why is not everyone who picks up weight training creating similar results?  
What are these RAISE principles about ?



#### Information overload and need for Principles

In the industry international standards exist against which you can benchmark or be certified to convince yourself and your customers that you are doing a good job at being effective and efficient. Well known to many of us is the ISO9000 standard, which contains the basic principles that prove that a company is in control of the proper management of their quality management.

In the role as expert for the Luxembourg normalization institute I contributed over the last years to the standard for project management - ISO21500. People have been doing projects since ages, for instance when building the pyramids. Many different methods have been elaborated and formally described in the last decades when it comes to project management. Methods like Prince2, Hermes, PMBok (Project Management Body of Knowledge). These methods all revolve around identical basic principles. Interestingly enough, only now in 2013 after literally 1000's of years of project management practice, the ISO standard that describes these universal valid principles has been formalized. This means this ISO

standard can now be used to evidence that you are doing proper PM, independent of which methods you are actually using.

In comparison to the above example, strength and associated muscle mass development sports is still a very confusing area when it comes to agreement of the basic principles which are universally valid and against which you can gauge whether a specific training method or routine will actually prove to be productive.

In strength sports an overload of unstructured information exist. A confusing mix of methods, routines, principles and special exercises exist in parallel and are heavily debated. Some exercises are named after a single person - like Scott curls – suggesting you can get arms like Lary Scott by using this exercise. Some describe vast collection of principles - like fi Joe Weiders – The Weider Principles. Heavily debated methods like Mike Mentzers Heavy Duty and HIT exist side by side of volume training promoted by Arnold Schwarzenegger. Recently more specific methods have come into being - West Side Barbell – promoted by Louie Simmons. There seems to be holy war out there when it comes to what is supposedly effective and efficient.



Let's go back in time some 30 years. When I started out training in the early eighties most routines were written and popularized by successful strength athletes and bodybuilders. Since there was no real money to make in the sports itself, their aim was to make money from promoting and selling their special routines. This of course meant they always had to distinguish themselves and be different from the next successful guy, positioning it as a unique product in the market.

On top of things, these athletes aimed at making a living from selling personalized versions of their routines and associated (phone, mail or personal) coaching - and thus severely manipulated the general audience into believing that everyone is unique when it comes to responding to strength training and muscle mass development - and thus in need of their own very specific exercises, routines and principles.

30 years later this confusion situation is, in my opinion, still very much dominating the strength training market. Maybe because the experience coaches of today are the very same pioneers of the 80's. Internet based information is now omnipresent but, since it is very unwieldy, seems to add more to the confusion versus helping out. I meet very confused trainees (and trainers) on a regular basis.

Classic fitness centers are often not geared toward the specific goal of strength development – but treat it as an accompanying phenomenon of the facilities and courses they provide. The strength gain is mostly not the main indicator used to gauge personal progress of the trainee. Promoting fun at moving , and in the process sell as many courses as possible, without specific goal or objective setting for the trainee is mostly what is going on at these centers. There is now even tendency toward (cheaper) basic gyms, where the facilities and equipment is made available, and proper guidance can only be obtained

as an extra. This means a trainee is very much on his own, just as in the early 80's. A standard practice is that you get a schedule made up and a chip card that sets weights for you on the machines, and you are left on the same routine for months.

Since any form or shape of exercising beats doing nothing, this is not all bad of course. But for sure it is not an effective and efficient approach if you walked into such a facility and your objective happens to be building significant strength and add substantial muscle mass.

I talk to trainees on a regular base that spent years at such a facility without achieving any significant strength and muscle mass increase. Explicit objectives of trainees are usually not stated as wanting to become a big bodybuilder – since society sees this as a-social. Fitness centers actively manage to keep bodybuilders and powerlifters out of the door, to not scare off general public potential customers. But despite all this beating around the bush, the implicit goal of most of the trainees I spoke to is indeed to become significantly more muscular. And this in return implies the need for significant strength gains.

Not achieving progress towards this in a reasonable amount of time results in severe de-motivation. This again results in trainees giving up training, believing they are genetically just not able to develop significant strength and muscle mass.

Observing all this over the last three decades and having experience with describing international standards, I believe universal principles describing whether the method and routine you are on will prove to be effective to build strength and muscle mass effectively and efficiently is certainly possible.

### **Universal Strength Development aspects**

First of all it important to understand a few universal aspects when it comes to strength development.

- Every specific sports objective will have a specific best practice approach and associated principles for reaching it.
- The mechanics of developing strength and muscle mass are for all persons identical - we are genetically all identical in that respect.
- The strength a certain person can develop in a certain exercise or movement can vary based on genetically differences. Bones structure, ie length of arms and legs in relation to core, how muscles/ tendons are attached to bones can result in better of worse leverage.
- In general we are all under-motorized due to our lifestyle in our western world. From being an average (strength) untrained person, one can increase his/her strength by 300%. Reaching your genetic normal strength level - which would be approximately double of current - can be achieved in a relative short time (1 to 2 years). Reaching the 300% mark can take many years of dedication.
- Significant strength and mass gains can be made independent of age or gender and are without health risk.

- Impressive strength and muscle mass gains can be made drug free. Drug free gains are sustainable for life. Drug free gains take longer to establish.
- You do not need to overeat or get fat first to gain muscle mass. Even if you gain 5 kg muscle mass per year, you only gain 14 grams of muscle weight per day – of which 80% is water, so only 3 grams of protein is the building block of that gain per day.

## RAISE

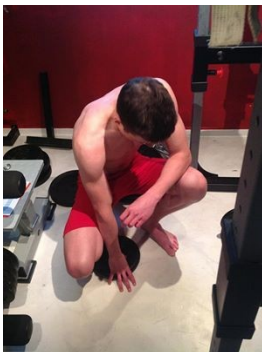
If your goal is to develop uncompromised strength and associated muscle mass gains in a relative short time, the principles which I boiled down to RAISE are what you need to work with.

There is no need to reinvent the wheel - various existing methods incorporate these RAISE principles to a larger or lesser extent. Methods like Heavy Duty and West Side Barbell are closer to it than volume training and classic powerlifting routes. Whatever method and schedule you are currently on or want to give a try – have a go and benchmark it to the RAISE principles to gauge whether it will prove to be effective and efficient when it comes to developing strength and muscle mass gains.

If you have other objectives, like endurance, general fitness, agility or running a marathon you will need to adhere to other principles. But whenever you want to or need to build a foundation of real strength and build muscle mass - you will need to benchmark your approach to the RAISE principles.

The strength development principles of **RAISE** are as follows:

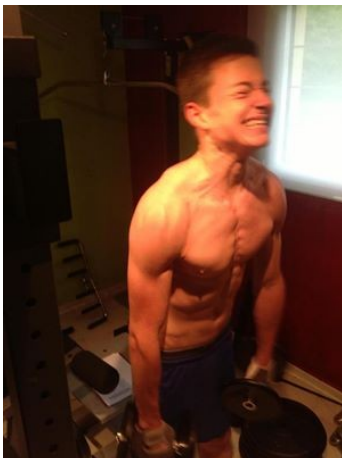
- **R: Rest well**
- **A: Alternate exercises frequently**
- **I : Intensity matters**
- **S: Short workout**
- **E: Eat well**



**R - Rest well.** Less is more here. Training sessions should be infrequent. Rest and recovery to provide the required super compensation effect between sessions can and should be 48 to 72 hours - if you work out without using drugs. The tolerance for training / and required rest can vary per person - but you need to learn to find and respect your individual limits. In general the stronger you get the more recovery time you will need. Sleep well - required duration differs per person and age, but do not undercut your required sleep hours chronically. Avoid alcohol in large quantities, as it disturbed your sleep and recovery. use active recovery techniques like sauna, massage, aerobics. These can be done on training days or rest days. If you train without the use of steroids your recovery capacity is limited and

you need to respect that. The good news is that becoming strong will not keep you from having a good social life. Keeping a balance with other activities and passions in life work your mental health, this adds to the general feeling of well being. This principle is in general very difficult for trainees to stick to. There is a tendency to think that “more is better” – so if 1 training every 3 days gives me a certain result, a more workouts will bring me more. This is not the case. If the mental desire exists to do more – I usually divert the trainees to do aerobic type exercises in addition or pick up a sport on strength training rest days (martial arts, running, dancing..). These activities are very complementary to strength training – and trainees usually do well at other sports – due to their increased strength and coordination capacities.

**A - Alternate exercises frequently.** Your central nervous system burn out quickly if you do the same exercises and in same sequence for longer periods of time. This phenomenon already occurs after a few weeks on the same routine. This results in decrease if strength gains or even loss of strength and is accompanied by a general feeling of fatigue and motivation. You are more likely to develop injuries (tendinitis) if you perform the same routine over and over. Consider that a low intensity movement like working with a computer mouse or playing a guitar can already cause RSI within weeks. Thus working with (heavy) weights the same way for weeks will do the same and that much faster, with more devastating results. Recommended is to vary exercises every 3 weeks if you are starting out, and near every workout if you get more advanced. Developing a whole arsenal of dozens of variations of exercises and equipment (bars, grips...) to facilitate them is a must. To develop significant strength you will use both maximum effort work and speed development movements. You keep a record of exercises performed and weights handled, to allow for measuring progress and planning your sessions. Some great smartphone / ipad apps exist to elegantly help you out on this versus doing it on paper.



**I – Intensity matters.** If you work out intense you handle weights close or over your current maximum in any exercise on your list all year around. There is no off season. You keep striving to add 1 more rep or a kg to your personal best. This adds 30-50% more effective training time to your yearly schedule. You will work intensely on your weak muscle areas to improve your maximum strength in big movements like squat, deadlift, benchpress. You keep a personal best record list and strive to break them at all times. You will do a brief warm up routine to get the blood flowing. Your rep range will be between 12 and 1 rep maximums. You train to temporary muscle failure frequently and use other techniques (negatives, static holds..) to add to intensity once in a while - but you avoid mental and physical (CNS) burnout due to doing this too often. Intensity is linked to

duration (the S in RAISE). Intense session will by nature be short (which is the good news). Intensity is linked to changing routines frequently and getting enough rest (the R and A and RAISE). Intensity can only be kept up if your central nervous system does not burn out – achieved through cycling exercises and getting enough rest. This principle is the one where most trainees fail at - if takes a very strong mindset to try to "raise the bar" each and every session and really strive for 1 more rep, 1 more kg and not fool yourself into believing you "did enough". Not many people are mentally able and willing to pay this price. Working out with a good supportive and motivating buddy, perform mental relaxations and programming practices, celebrate and recording breaking records are valuable tactics towards the required mindset.

**S – Short workouts.** Intense training sessions will be short by natural causes.

There is just no way to train real intense for longer periods of time. If you think you can or are, you are fooling yourself. Training real intense means you will physically and mentally not be able to sustain the workout over 45 minutes to one hour. Exhausting yourself for hours per session with many exercises and sets will be automatically performed with moderate or low weights. This will for sure make your very fit in endurance and general fitness respects - and as such there is nothing wrong with it - but will not result in most effective path to significant strength and muscle mass gains. You will use some 2-3 exercises per bodypart, and the amount of sets per exercise will be limited to one or two. Working up to maximum effort in major movements like squat, dead lift, benchpress or derivatives of these (racklifts, goodmornings, boardpress, inclined press..) can take more sets in low rep (2-3) range. This principle is in general very difficult for trainees to stick to. There is a tendency to think that "more is better" – so if 45 minutes of training gives me a certain result, a longer workout will bring me more. This is not the case. If the mental desire exists to do more – I usually divert the trainees to do aerobic type exercises in addition or pick up a sport (martial arts, running, dancing..). These activities are very complementary to strength training – and trainees usually do well at other sports – due to their increased strength and coordination capacities.



**E - Eat well.** Stick to a well balanced diet. Eat plenty of fruit and vegetables. The classic low fat, high carbs, moderate protein approach works. Eat 3-5 times a day. Avoid junk food. Don't smoke. Match your energy intake to what you expense. This can vary greatly based in age, gender, body composition and activity levels and must be approached rather mathematically. Chronically "under-eating" is as bad as taking in too much. Don't bulk up on excess body fat for the sake of getting heavier. Stay lean all year around. The good news is that more muscle mass

will have you burn more calories each day as aort of your basic metabolism, which in return helps in staying lean. Many supplements are useless - a few have proven their value. Creatine supplements work. Taking a good base vitamin supplement can assure you to have no deficits. Similar for protein

intake, a shake or 2 day can assure having no intake deficits. But more will not help - it will just make you fat. Time and effort spent on RAISE outweigh huge amounts of money spent on supplements.

KSC Groovy – We Are growing

