

# High-level Human Performance, Part One: Overreaching

Researched and Composed by Adam " Old School" Knowlden

## Abstract

"Elite athletic performance is dependent on a systemized training program."

-Barnes Chiu

Applying this statement to our case as bodybuilders, enhanced performance would relate well to increases in strength, endurance, and power. However, operating within the framework of hypertrophic variables demands these constants vary from the broadest sense of their terms to more specific applications.

To better understand how to manipulate such a multifaceted number of training program modifications available in order to achieve our goals, namely new muscle growth, we must first cover the two models, the general adaptation syndrome and the fitness-fatigue theory, from which these modifications will be based.

*"Despite the many different versions of periodization we have used, we essentially have "periodization" as a concept that can be defined by programmed variation in the training stimuli with the use of planned rest periods to augment recovery and restoration of an athlete's potential. Again, the key factor to optimal gains going toward one's genetic potential is "variation" in the exercise stimulus with systematic rest programmed into the equation. How that variation is achieved and used is the topic of a wide variety of different training goals and must also be individualized for each athlete and sport to achieve optimal success in his or her sport."*

- William J. Kraemer (Haff, 2004).

The general adaptation syndrome was the original prototype from which Periodization was designed.

See: [Periodization Part I – History and Physiological Basis](#) (Wilson, J., & Wilson G., (2005)

The general adaptation syndrome provides an illustration of the physiological response an organism has to stress.

The fitness-fatigue theory provides a more comprehensive model of the physiological responses to training stimuli.

The fitness-fatigue model makes the contention that different training stresses result in different physiological responses.

---

## Overreaching

Overreaching can be defined as the deliberate application of stressful training for short-term periods interspersed with brief periods of recovery.

This short-term period of intense stress results in a considerable fitness and fatigue after-effect. Since the duration of the fitness after-effect is longer than the fatigue after-effect, an episode of rest allows fatigue to reduce while fitness remains high.

Wilson, J., & Wilson G., (2005) have proposed that this frequent cycling of training and recovery phases is necessary to improve performance in elite athletes.

See:

[Periodization Part 2 – Divisions of the Training Cycle](#)

[Periodization Part 3 – Traditional and Non-Traditional Periodization](#)

(Wilson, J., & Wilson G., 2005)

Before we delve into the fitness-fatigue model and how it applies to overreaching, we will first study a few practical definitions of this concept from some of the world's leading scientific experts:

**Kramer (6):** *“Overreaching (OR) is where one increases the training stimuli in order to create a decrease in performance but one that has a “supercompensation” response or a rebound with increased performance at some point in time after the OR phase is completed*

**O'Bryant (6):** *“Overreaching is a type of periodization where short-term (1 to 2 weeks) increases in volume or intensity are followed by a return to normal training. This brief phase can result in a delayed performance increase approximately 2 to 5 weeks after return to normal training.”*

**Pendlay (6):** *“Overreaching is an imbalance between the training means and the recuperative abilities of the athlete, resulting in a short-term decrease in performance, lasting from 2 to 3 days to 2 to 3 weeks.”*

**Plisk (6):** *“Overreaching is an advanced training strategy where volume loads are increased for 2 to 3 weeks and then reduced to normal levels to enhance adaptation and performance 2 to 5 weeks later by virtue of a “rebound” (supercompensation) effect. It requires careful planning and understanding of cumulative and delayed training effects. Overtraining (OT) is a maladaptation syndrome resulting when OR-type workloads are applied inappropriately, for example, over prolonged periods or without adequate recovery or regard for the additive effects of other stressors. Long-*

*term performance decrements and fatigue seem to be the universal indicators of OT and may or may not be accompanied by other symptoms."*

**Stone (6):** *"Overreaching is a condition produced most often by sudden increases in training volume. OR may produce some of the signs and symptoms of OT but not as severe. A reduction in training volume or intensity and return to normal training can produce an increased performance several weeks after the OR. Sometimes a supercompensation effect will occur boosting performance to new levels. Thus, OR can be planned (carefully) into the periodized program (usually 1 to 2 weeks of increased volume) and may result in a performance boost."*

It is important to consider the relationship between the theory of fitness-fatigue and delayed training effect when planning training routines for elite athletes.

Advanced bodybuilders can tolerate greater volume load and training intensity than novices. Furthermore they require much more stress to stimulate adaptations. The frequent imposition of these stresses, however, makes the athlete more susceptible to overtraining. The need for variation in volume load and intensity are the rationale behind short-term overreaching.

In order to better understand overreaching we must first understand why it is not overtraining.

## **Overtraining**

First it is vital to understand that the fitness and fatigue after-effects are dynamic and not static. If training occurs while fatigue after-effects persist, additional after-effects will superimpose existing ones, intensifying inadequate adaptation (1).

However, it is possible for performance decreases to not occur because of the positive effect of the fitness after-effects.

Over time, the constant accumulation of fatigue after-effects results in a depletion in the bodybuilder's adaptive capacity, which finally results in overtraining. This is why we implore [tapering](#) into the periodization equation.

However, this factor is where the general adaptation syndrome falls short. It cannot explain why performance drops sharply when overtraining occurs.

If we follow the general adaptation syndrome model, performance should decrease gradually with the addition of more and more stress. However, empirically this is not the case. In the fitness-fatigue model, fatigue accrues, and at the point when fatigue after-effects greatly exceed fitness after-effects, this is where overtraining occurs.

Overtraining typically requires a greatly prolonged period of stressful training to achieve (3, 13). In preparing elite training programs we will not underestimate the adaptive abilities of the human body (4).

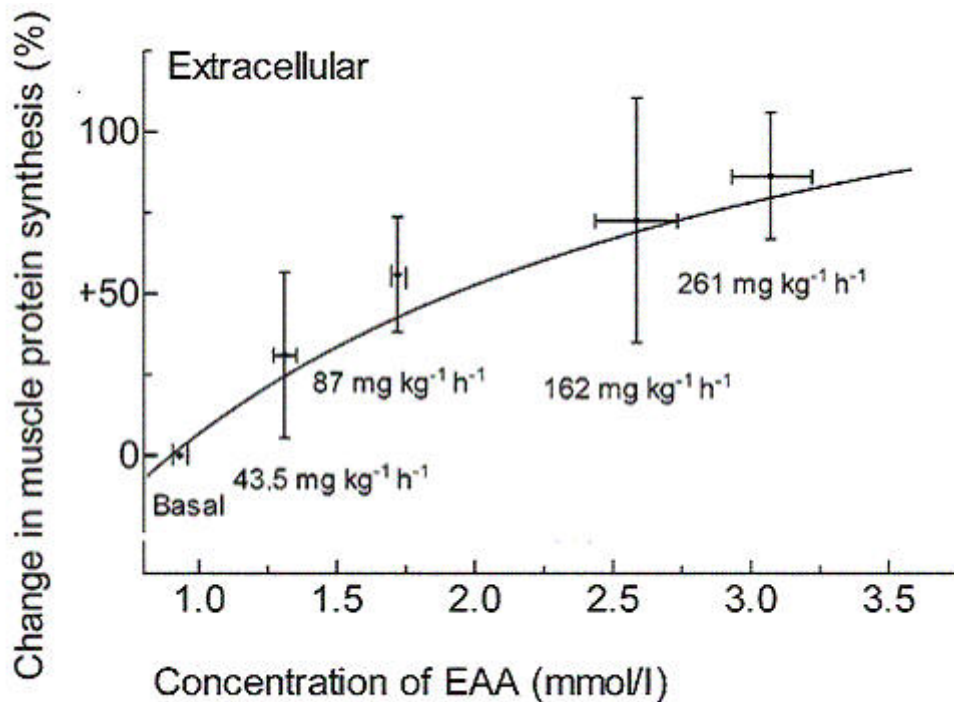
Sports scientists are overwhelmingly concluding that individuals will never reach a true overtraining state (12).

Previous research in elite athletes has found an ability to tolerate a threefold increase in training volume for periods up to three weeks (4, 13).

A conclusion reached by Lehmann is that overtraining resulting from load and intensity factors seems to resolve faster than overtraining resulting from excessive training volume. Overtraining from increased loads or training intensity should resolve within a few weeks of rest (5, 7, 13). It is my recommendation that instead of total rest, if one feels they are in an over-trained state, a [taper](#) would be more optimal (Wilson, J., & Wilson G., (2005)

### Overreaching and Supplementation to Obstruct Overtraining

Amino acid supplementation has been demonstrated to heighten recovery during bodybuilding type programs by increasing protein synthesis, reducing protein degradation, and reducing muscle damage. The following chart illustrates the amount of EAAs in the blood stream and their relationship to protein synthesis:



Adapted from Bohe J, Low A, Wolfe RR, Rennie MJ. (2003) Human muscle protein synthesis is modulated by extracellular, not intramuscular amino acid availability: a dose-response study. *J Physiol.* 552(Pt 1):315-24.

Furthermore, amino acid supplementation has been shown to increase glycogen resynthesis when amino acids are ingested with glucose (2).

There is little doubt that efficient recovery of protein metabolism is critical to the anabolic processes occupied in preservation and progression of skeletal muscle hypertrophy (11).

Higher volume and high-intensity, the two factors involved in overreaching, increase the need for amino acid intake (9, 11)

One study conducted by Ratamess, Kraemer, Volek, Rubin, Gómez, French, Sharman, McGuigan, Scheett, Häkkinen, Newton, and Dioguardi (12), which directly compared amino acid intake, as applied to an overreaching cycle concluded:

"...Muscle strength and upper-body power were significantly reduced only during the initial phase of overreaching in the placebo group. A reduction was not observed in the amino acid group, thus showing the importance of greater amino acid intake during this initial phase of overreaching. Conversely, with the increase in the intensity and partial reduction in volume of the overreaching protocol, no performance reduction was observed during weeks 3 and 4. This demonstrated that the ability of resistance-trained men to rapidly adapt to a new training stimulus helped mediate a successful overreaching endpoint of higher performance values. "

[Champion Nutrition's Amino Acid Shooter](#) would serve as a great supplement to enhance any overreaching program.

Other supplements that I would consider fundamental when approaching an overreaching plan would include [Creatine](#), [whey protein](#), [HMB](#), and [glutamine](#).

Also vital to this line up is a [Post-workout anabolic cocktail](#), consisting of [maltodextrin](#), [dextrose](#) and [whey protein](#).

## **Theoretical Practical Applications**

I labeled this section "theoretical practical applications" as there have been no direct studies implementing overreaching specifically to hypertrophy. Theories regarding a lack of new muscle growth during overreaching experimentation have been explained (12).

The referenced study based the lack of hypertrophy on duration of cycle, lack of rest and recovery, and high stress levels at the onset of the program.

However, what must be noted is that first, the overreaching program I will be creating is not modeled after the program the authors of this study utilized. The theoretical applications will be similar, however the structure completely different.

The scientists involved in the referenced study were primarily focused on increasing power output, and conducted full body workouts, whereas the goal of my program will be to create a hypertrophic response in elite athletes (*Note: I do believe that*

*overreaching can be utilized by novice bodybuilders however not near to the duration I will be describing, see practical applications for more details).*

I based my practical applications upon two sources:

1. The definitions of overreaching described by the quoted exercise scientists earlier in this paper. From their descriptions, I concluded that real-life application of overreaching can fluctuate.
2. Various scientific application of this training variable, both empirical and observational (see references).

**\*\*Comments in italics are my personal notes, and how I will apply each principle to the program included with this journal entry. They are included to help you better create your own overreaching program.**

1. The two key components of overreaching appear to be volume (I will further manipulate this through frequency) and intensity, as such both should be increases significantly.
  - a. Volume at its core is the total amount of work performed. It can be broken down into work performed per exercise, per session, per week, per month, and so on (O'Bryant, 6). It also refers to training quantity, usually expressed in terms of repetitions and sets performed (Plisk, 6). Or even more broken down, volume is the amount of work done in one training session (Pendlay, 6). It can also be described as the total work performed when applied to a weekly planning session (O'Bryant, 6).

*One of the primary ways I will increase volume in my program is via increased frequency. Frequency is the number of training sessions per week, per day, etc. (O'Bryant, 6)*
  - b. Intensity is the quality of effort during training or power output, force multiplied by velocity (O'Bryant, 6). Even simpler, intensity is the difficulty of the training done relative to the maximum that the athlete is capable of (Pendlay, 6). Furthermore, intensity is proportional to training quality (Plisk, 6).
2. Overreaching is described as a short-term cycle, lasting from a few days to several weeks.

In theory, I believe that the time frame could be applied in such a way that the variations could be categorized based on experience of the bodybuilder.

For example a novice bodybuilder may conduct a one-week overreaching cycle, whereas an advanced bodybuilder could include a 5-week overreaching cycle into their program.

Furthermore, I propose this could be broken down based on the muscle group this application is being applied to. I also believe more than one overreaching cycle can occur at one time, for instance a cycle implementing one upper body muscle and one lower body muscle. Another deviation could be an overreaching protocol focused on opposing muscle groups such as biceps and triceps. However, I believe that the increased volume demanded by overreaching will subsequently demand a decreased volume from other body parts taking away from overall training volume. This would have a negative impact on hypertrophy so the amount of overreaching cycles should be limited. In my opinion, to go beyond two cycles would diminish overall training too much.

Another categorization by which to implement overtraining is to base the duration on muscle fiber make-up.

As an example of applying muscle group sorting to overreaching, the soleus is loaded with slow-twitch fibers and has a much higher fatigue resistance level than say the bicep femoris.

(See: [Muscle fibers part 2](#), Wilson, J. 2003)

In these cases of dense, high fatigue fiber ratios, longer overreaching cycles could be applied to experience optimal results.

Many muscle groups are fairly evenly distributed in terms of percentage of relative muscle fiber type. In these instances an average duration overreaching cycle of 3-5 weeks should apply.

Overview	Muscle Fibers		
Type	Slow Twitch (I)	Fast Twitch ( IIA)	Fast Twitch (IIB)
Fatigue Resistance	High	Medium	Low

(Graphs taken from: [Muscle fibers part 2](#), Wilson)

I will be utilizing a 5-week overreaching cycle directly applied to the

Latissimus dorsi, which tends to consist of a near 50/50 ratio of fast and slow twitch muscle fibers.

3. For bodybuilding purposes overreaching should be hypertrophy specific, although lower repetition ranges will be assigned periodically. This should be done in effort to actively stimulate as many muscle fibers as possible during the short-term cycle.

Overview	Growth In Muscle Fibers Below			
Repetition Range	Type I	Type IIA	Type IIB	Strength Gains
1-2 repetitions	Very Low	Low	Low	Excellent
3-5 repetitions	Very Low	Low	Decent to Good	Excellent
6-8 repetitions	Very Low	Good	Excellent	Good
9-12 repetitions	Low	Excellent	Very Good	Good Within Rep R.
13-15 repetitions	Decent	Very Good	Decent to Good	Endurance
16-25 repetitions	Very Good	Diminishing	Low	Endurance
25-50 repetitions	Excellent	Low	Very Low	Endurance

In my program the first two weeks will consist of 10-15 reps for 5-10 sets, while the second two weeks 1-10 reps, 3-5 sets (this rationale would apply better for more evenly mixed fiber ratio groups). The remaining week will be a taper.

- I theorize that the cycle can be very narrow or very specific, and this too would affect duration of the cycle. For example directly targeting a particular muscle, such as the erector spinae, this would demand a shorter overreaching cycle, compared to targeting the entire back complex, which would require a longer overreaching cycle and less muscle-specific criterion lifts. I also believe a large muscle group, like the back, or legs, which also consist of an evenly distributed muscle fiber ratio, can sustain a much larger amount of work over time. Therefore, applying overreaching to large muscle groups is less likely to result in overtraining.

I will be utilizing a 5-week overreaching cycle directly applied to the Latissimus dorsi.

- An overreaching cycle can be broken down into microcycles.

One study suggested that a higher volume phase be implemented in the overreaching cycle before a high intensity phase (12) in order to optimize the large fitness and fatigue after-effect overreaching offers. This is somewhat contrary to the typical theory of short-term training in which intensity tends to be placed early in the week, as the fatigue after-effect is shortest for maximal intensity training.

However, short-term overreaching is the deliberate imposition of stressful training for brief periods interspersed with periods of recovery. This period of rest allows fatigue to diminish while fitness remains high.

For example, the first two weeks of an overreaching phase could be structured around higher repetitions and higher number of sets (higher volume), while the second phase lower number of reps and a lower number of repetitions (higher intensity). The fifth week would consist of a taper.

In my program the first two weeks will consist of (this would apply better for more evenly mixed fiber ratio groups) 10-15 reps for 5-10 sets, while the second two weeks 1-10 reps for 3-5 sets. The last week will be a taper.

However, I do not suspect this is the only application that can be utilized. Again, no study has applied overreaching directly to hypertrophy, so further study needs done to confirm this, however I do believe phase blocking is a sound approach.

The body's ability to rapidly adapt to the stresses of an overreaching protocol (i.e., changes in protein kinetics, neural activation, etc.) in resistance training clearly demonstrates the need for variation in program design.

In this light I do believe phases that mix the variable types in an overreaching cycle is a sound conclusion when applied to hypertrophic specifications, as initial stress of eccentric training may take place in as few as 13 days (10).

6. Use 1-3 criterion lifts, incorporating multiple training techniques.

In my example, I am going to implement an overreaching cycle for back, in particular the Latissimus Dorsi. I will be utilizing the pull-up, the pull-down, and the row as my three criterion lifts. However, during the first two weeks I will be switching the style of these lifts daily. Day one may utilize wide-grip pull-up, day two close grip pull-ups, and day three mixed grip pull-ups. However, during the second phase, I will utilize the same mechanics repeatedly to increase intensity. For instance, wide grip pull-ups daily, using straps to exclusively fatigue the targeted muscle. No matter the phase, I will incorporate three types of resistance exercise, divided among the total number of sets. So for instance, during a 10 set day, I may do 4 sets of pull-ups, 3 sets of pull-downs, and 3 sets of rows. While on a 3 set day, one set of each criterion lift. My goal is to implement a multitude of angles to further shock the muscles into growth. This will also offset boredom of training the same group daily, thus keeping intensity higher.

7. Training frequency:

Frequency is one of the primary factors that will be manipulated in this program. I recommend training the targeted muscle group six (6) days per week to optimize my theory.

During my program the targeted muscle (Latissimus Dorsi) will be trained six times per week.

- a. *Two of the working days I will toil in the higher rep range of the particular phase I am incorporating. For example during phase one, I*

*will be working in the 10-15 rep range for 5-10 sets. I will list rep and set numbers in the spread sheet, however this will also be based on instinctive training and is subject to change as I enter the gym.*

b. *Also I will be combining standard short-term training theory to overreaching in that I will incorporate higher intensity at the beginning of the week. So I will tend to work more in the 10 rep, 5 set range at the beginning of the week and the 15 rep, 10 set range at the end of the week to shorten the fatigue after-effect. This rationale will apply to both phases.*

c. *To make the layout less confusing, let me simplify the rationale:*

- The overall program will consist of one mesocycle containing five microcycles. The mesocycle will last five weeks. Each week will be described as a microcycle and will vary in terms of rep ranges and number of sets.
- The layout of the program as a whole will be described as one mesocycle and will consist of five microcycles (five weeks).
- The first two microcycles within the mesocycle will emphasize increased volume (higher number of sets / higher number of reps), followed by two microcycles emphasizing increased intensity (lower number of sets / lower number of reps). This rationale is applied to enhance the effects of overreaching as Ratamess, Kraemer, Volek, Rubin, Gómez, French, Sharman, McGuigan, Scheett, Häkkinen, Newton, and Dioguardi (12) recommended in their study. The final microcycle will be a one-week taper.
- However, within each microcycle, short-term training theory will be applied. In other words higher intensity training will occur **before** higher volume training, to counterbalance residual fatigue effects as much as possible for this type of design. The rationale here is that, fatigue after effects last longer following volume training and overtraining resulting from intensity factors resolve faster than overtraining resulting from excessive training volume. As such the more volume oriented portion of each microcycle will occur closer to the assigned rest day (Day 7), to help offset overtraining.
- So while I will be working in a higher rep range during the first two microcycles, I will work in the lower end of the rep-range spectrum the first two training sessions of the microcycle and the lower end of the rep-range spectrum the latter two sessions of the microcycle.
- See [overreaching microcycle tables](#) for a detailed breakdown of the above dissertation.

## 8. Training style:

Regarding various training styles, the program should combine active recovery, hypertrophic, and strength specific regimens.

The [spreadsheet](#) included with this program will outline the specifics as to which style I will be using on any given day. I will be combining active recovery, hypertrophy specific, and strength protocols into the program. I will not list specific shock workout days because this entire program is a shock. However, I will incorporate some shock technique in order to fulfill repetition requirements as are listed in the spreadsheet. For example, if I am striving for 10 reps of wide-grip pull-ups and fail at 8, I may use a step to force out the other two reps, thus using shocking methods to achieve my goal.

- a. Active recovery will be employed two times per week.

The following is an excerpt from [Venom's Training Program](#) (Wilson, G. 2005):

*[Active Recovery - A Threefold Breakdown.](#)*

*I will perform a few light, high rep resistance training exercises. The goal is to enhance blood flow to the area, but at the same time, avoid any micro trauma to your muscles. As such, the weight will be of minimal resistance, and approximately 20 reps plus. Studies show eccentric training causes extreme muscular damage (refer to the following article for extensive research on this, [Cliff Hanger Part 1](#)). As such, I will avoid tension on this portion of the repetition by performing a 1 second eccentric repetition per rep. The concentric aspect of the lift will last 1-2 seconds. I will do around 2-5 sets per muscle group.*

- b. Hypertrophy principles will be applied during the first two microcycles, namely increased volume and decreased intensity. Higher reps with one to two minute rest periods will suffice.
- c. Strength protocols will be applied during the final two microcycles, consisting of higher intensity and lower volume. Three to five minutes rest will be ample time to recover between sets. For more details see [Venom's Training Program](#) (Wilson, G. 2005).

9. In order to accommodate the excessive volume demands of overreaching, various training methodologies should be implemented in an effort to spare reducing volume for other body parts. I theorize that the more concentrated volume is on a specific targeted group in volume will exponentially decrease for other groups. The essence of the priority principle is that one will taper training in other areas, in order to focus the extra energy on a more specific targeted area. Normally this can be done with relatively little change to a

program. For example simply training shoulders first in a workout during a deltoid priority program. With overreaching this principle is applied to the extreme end of the spectrum.

There are however, several strategies that could be utilized in an attempt to offset volume decay, I will list what I believe will be the four most efficient: 1) Apply the overreaching portion in the AM and standard training PM. 2) Staggered sets 3) Priority principle 4) Decrease volume of secondary movers and stabilizers.

*In order to offset this effect as much as possible, I will implement both priority training (train back first) and staggered sets (A staggered set is one in which a body part that is being prioritized is worked in-between working another body part. For example, a classic example is staggering calf training. So, even if the athlete is training, say back, in between each working set of back, the bodybuilder will perform a set of calves. Frequency of training can be increased greatly in this manner, making efficient use of prioritization) during the first two microcycles, which tend to consist of a high number of sets. I will do half the required sets first, and then stagger the remaining sets.*

*During the third and fourth microcycles I will work back first fully imploring the [Priority Training Principle](#).*

*Furthermore, I will decrease volume in the secondary movers and dynamic stabilizers (chiefly biceps and forearms). This will also help avoid overtraining these two smaller muscle groups. The underlying principle for reducing volume in these areas is that these two muscle groups will be taxed heavily over the four-week duration due to the nature of this program's intensity. Notwithstanding, I am expecting growth in these areas as well due to the high stress levels they will be forced to endure.*

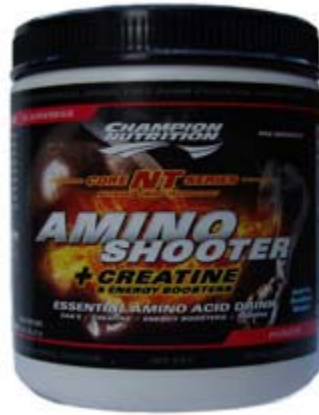
10. A one to two week taper of the muscle group trained during the overreaching cycle should be implemented after the mesocycle is completed. Regarding the length of the taper, this will be largely instinctive. However, I would still advise a quality taper. By quality I mean that the muscle group that has been prioritized will have ample time to reap the rewards of the overreaching cycle. For instance, if you applied overreaching to say just the Trapezius, I would also recommend tapering the entire back complex following an overreaching cycle in order to fulfill the complete supercompensation effect. I will taper my back for one week upon cessation of the mesocycle.

In theory, the tapering period is when maximum hypertrophy will be induced, due to the supercompensation effect of the cessation of the overreaching program. I recommend really increasing calories and protein during week five. Do not just think of this as a rest week because you have reduced volume and intensity. In order to get the maximum results of this program, week five should be taken just as **seriously** as week one. Read this article for information on how to taper, [Tapering Part 3 - Practical Applications](#).

11. Amino Acid Supplementation is absolutely vital to an overreaching program. I would not even attempt an overreaching cycle without [Champion Nutrition's Amino Acid Shooter](#). There appears to be a very fine line between

overreaching and overtraining. Research has shown that this line almost vanishes with proper amino acid intake (12).

[Champion Nutrition's Amino Acid Shooter](#) is the optimal product of choice for anyone serious about gaining mass on an overreaching cycle.



*I will consume four (4) scoops of amino acid shooter per day during the overreaching cycle. This will be divided into three periods of consumption per day.*

*One scoop of the standard amino acid shooter will be ingested first thing upon awakening, and the other scoop between meals three and four. In the AM cocktail I will mix 5 grams of creatine, 5 grams of Glutamine and 1 gram of HMB. In the mid-day cocktail I will mix 5 grams of Glutamine and 1 gram of HMB.*

*The other two scoops will be consumed directly before my workout and too will consist of 5 grams of creatine, 5 grams of Glutamine and 1 gram of HMB. I will utilize the energy boosting amino acid shooter pre-workout.*

12. Do you have any theories on applying overreaching to hypertrophic training? If so, click her to [register today!](#) Its 100% free! After joining, post your theories in the all-new [Forum of HYPERplasia Research - The Lab!](#)

## Spiritual Applications

**John 3:30 "He must increase, but I must decrease."**

When John the Baptist was preaching in the wilderness, mass crowds of people would come out to hear him speak on the coming Kingdom of God.

As the time drew nearer for Christ to begin His earthly ministry, John prophesied in John 3:30, his time would be diminished because his assignment would be near

completion. John made it clear that his job was to prepare the way of the Lord, not to make the sacrifice necessary for the concepts he was preaching. Once the way was prepared he would decrease from the scene and Christ would assume His role as the sacrifice.

John prepared the way for the kingdom to be ushered in by advocating the concepts of repentance, while Christ would bring the manifestation of the kingdom to earth by offering himself to make repentance possible.

This too must be outlook in our walk as Christians. We must decrease and Christ must increase.

When we applied overreaching to our goal of increasing mass we saw that through increased intensity and increased volume we could manipulate the fitness-fatigue theory to have rebound effect and increase performance.

These same factors can be applied to our spiritual bodies to increase Christ and decrease our ego.

The bible declares that when Christ takes up residence within us, that He gives us a new heart filled with new desires.

However, it is also stated that consistent reading of the Word of God waters these new desires!

There is a very clear correlation between the volume of God's Word we have in our heart and the tapering of our egos.

### **Hebrews 4:12**

**"For the word of God is living and active."**

The Bible is alive! It's not just some dusty collection of history books that does not apply today. It contains the literal eternal words of God! It applies to all ages and to all people because it is everlasting and its contents represent the heart of God.

The bible is as alive as Jesus. You see John chapter one declares that the Word of God is Jesus.

### ***John 1***

**"In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. The Word became flesh and made his dwelling among us."**

Jesus was simply the Words of God, the expression of the Father's heart, in a bodily form. He was the express image of God.

Jesus said, **"The things that come out of the mouth come from the heart"**.

What is in one's heart is the true essence of who that person really is. So we can understand what is in God's heart by reading the bible. And we can understand that whenever Christ spoke, He was speaking what was in the heart of God.

This concept of God's heart manifesting in human form, is impossible for our minds to fully wrap around. But imagine if you could take all the desires that were in your heart, and form them into a person. This is what God did and sent to us in the form of his Son.

When Jesus spoke, He said nothing out of His own heart; each Word was from the heart of Father God.

Jesus gave them this answer: "I tell you the truth, the Son can do nothing by himself; he can do only what he sees his Father doing, because whatever the Father does the Son also does.

I am the one I claim to be and that I do nothing on my own but speak just what the Father has taught me."

Jesus was the heart of God incarnate! Since we know Jesus is alive, we know that the Word of God is alive, because Jesus is the Word. By this we also know the heart of God is unchanging and perfectly Holy.

If the bible is living that means it can have a "right-now" impact on our lives and intercede in our existence where we need it the most.

Furthermore, increasing the intensity of our study can likewise have a residual effect similar to overreaching, in that when performance is demanded, the supercompensation effect will result in an increased Godly performance in our daily witness.

Before midnight 2005, many of us have probably made a few "New Year's Resolutions", but how many actually keep them more than a few weeks?

"I'm going to be a happier person", "I'm going to be a harder worker", "I'm going to be more patient", and the list of personality traits we desire goes on and on...

I would propose that the reason these "resolutions" never get fulfilled is because we are trying to accomplish them in our own power.

If you are honest about resolving an issue in your life, I challenge you to find some passages of scripture on the topic you are concerned with and read about it daily.

For example, if you struggle with patience you might write down the following passages and read them a few times per day:

Colossians 1:10-12 (New International Version)

<sup>10</sup>And we pray this in order that you may live a life worthy of the Lord and may please him in every way: bearing fruit in every good work, growing in the knowledge of God, <sup>11</sup>being strengthened with all power according to his

glorious might so that you may have great endurance and patience, and joyfully <sup>12</sup>giving thanks to the Father, who has qualified you to share in the inheritance of the saints in the kingdom of light.

Colossians 3:11-13 (New International Version)

<sup>12</sup>Therefore, as God's chosen people, holy and dearly loved, clothe yourselves with compassion, kindness, humility, gentleness and patience. <sup>13</sup>Bear with each other and forgive whatever grievances you may have against one another. Forgive as the Lord forgave you.

Now you may say, "But wait there is nothing there that teaches me how to have patience", but my friend you would be missing the point! The words that are written above are not just words...they are alive, the very essence of Christ!

They can breathe life into you and change your heart, just by you reading them and studying them. Reading and meditating on the Words, is all it takes because now you are not doing the work anymore, you're letting God do the work, and that is what God requires; For us to get our hands out of the matter, and let Him have full control.

When we read the word of God we are honoring God because we are essentially telling Him, "Lord I can't help myself, I need you to help me". Reading the Word is a proof of our faith in Him, and allows the Word's active power to work in our lives.

Now that does not mean you have to have this great faith for the Word of God to go to work in your heart. No. God will accept you "as is". Don't resolve to "turn over a new leaf then I'll come to God!" come to God just as you are, and He'll not only turn over the leaves, He'll uproot the whole tree from the dry parched ground its currently in and plant it next to a river of water!

### ***Psalm 1***

**Blessed is the man whose delight is in the law of the LORD, and on his law he meditates day and night. He is like a tree planted by streams of water, which yields its fruit in season and whose leaf does not wither.**

God created us with the capacity to fill our minds with His Word, which sinks into our minds and seeps into our soul and changes us. However, instead many of us chose to fill our minds with trash like dirty movies, profane music, and new age doctrines like "positive attitude teaching".

I challenge each of you to set aside these man-made, "do it yourself" programs, and utilize this method of daily scripture reading throughout the duration of your 30 day overreaching program, and come back and tell me if you are not only physically but spiritually more developed!

Supplement this with a few minutes of prayer. I guarantee you will begin to see realization of your vision!

**Adam "Old School" Knowlden**

[oldschoolabcbbing@gmail.com](mailto:oldschoolabcbbing@gmail.com)

### Sources and References cited:

1. Bannister, E.W. Modeling elite athletic performance. In: *Physiological Testing of the High-Performance Athlete*. J.D. MacDougall, H.A. Wenger, and H.J. Green, eds. Champaign, IL: Human Kinetics. 1991. pp. 403–424.
2. Coombes, L.R., and L.R. McNaughton. Effects of branched-chain amino acid supplementation on serum creatine kinase and lactate dehydrogenase after prolonged exercise. *J. Sports Med. Phys. Fitness*. 40:240–246. 2000.
3. Fry, A.C. The role of training intensity in resistance exercise overtraining and overreaching. In: *Overtraining in Sport*. R.B. Kreider, A.C. Fry, and M.L. O'Toole, eds. Champaign, IL: Human Kinetics. 1998. pp. 107–127.
4. Fry, A.C., W.J. Kraemer, M.H. Stone, B.J. Warren, S.J. Fleck, J.T. Kearney, and S.E. Gordon. Endocrine responses to overreaching before and after 1 year of weightlifting. *Can. J. Appl. Physiol*. 19: (4) 400–410. 1994.
5. Fry, A.C., J.M. Webber, L.W. Weiss, M.D. Fry, and Y. Li. Impaired performances with excessive high-intensity free-weight training. *J. Strength Cond. Res*. 14:54–61. 2000.
6. Haff, G. Gregor PhD, CSCS. 2004: Roundtable Discussion: Periodization of Training—Part 1. *Strength and Conditioning Journal*: Vol. 26, No. 1, pp. 50–69.
7. Johnson, E.J. High power overreaching and dietary intake. Unpublished Master's thesis, University of Memphis, Memphis, Tennessee. 2003.
8. Lehmann, M., H.H. Dickhuth, G. Gendrisch, W. Lazar, M. Thum, R. Kaminski, J.F. Aramendi, E. Peterke, W. Wieland, and J. Keul. Training-overtraining. A prospective, experimental study with experienced middle- and long-distance runners. *Int. J. Sports Med*. 12: (5) 444–452. 1991
9. Lemon, P.W.R., M.A. Tarnopolsky, J.D. MacDougall, and S.A. Atkinson. Protein requirements and muscle mass/strength changes during intensive training in novice bodybuilders. *J. Appl. Physiol*. 73:767–775. 1992
10. Mair, J., M. Mayr, E. Muller, A. Koller, C. Haid, E. Artner-Dworzak, C. Calzol, C. Larue, and B. Puschendorf. Rapid adaptation to eccentric exercise-induced muscle damage. *Int. J. Sports Med*. 16:352–356. 1995.
11. Mero, A., H. Pitkänen, S.S. Oja, P.V. Komi, P. Pöntinen, and T. Takala. Leucine supplementation and serum amino acids, testosterone, cortisol, growth hormone in male power athletes during training. *J. Sports Med. Phys. Fitness*. 37:137–145. 1997.
12. Nicholas A. Ratamess, William J. Kraemer, Jeff S. Volek, Martyn R. Rubin, Ana L. Gómez, Duncan N. French, Matthew J. Sharman, Michael M. McGuigan, Timothy Scheett, Keijo Häkkinen, Robert U. Newton and Francesco DiGuardi. 2003:

The Effects of Amino Acid Supplementation on Muscular Performance During Resistance Training Overreaching. *The Journal of Strength and Conditioning Research*: Vol. 17, No. 2, pp. 250–258.

13. Stone, M.H., H. O'Bryant, and J. Garhammer. A hypothetical model of strength training. *J. Sports Med. Phys. Fitness*. 21:342–351. 1981.

14. Tipton, K.D., and R.R. Wolfe. Exercise-induced changes in protein metabolism. *Acta Physiol. Scand*. 162:377–387. 1998.