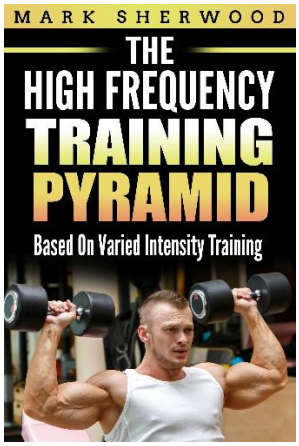
The High Frequency Training Pyramid

Based on Varied Intensity Training



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Introduction

Training at peak levels of intensity in every workout can lead to burnout. Powerlifters have known this for decades and have used the concept of alternating between heavy workouts and light workouts. The utilization of variations in workout intensity has helped many people to break out of training plateaus and to make more consistent strength gains. Most lifters limit the variation of training intensity to two workouts per week by doing a light workout and a heavy workout, or a speed workout and a heavy workout. However, with the inclusion of additional variations of intensity that are properly balanced, just about anyone can utilize high frequency training.

The relationship between intensity and frequency is very, very, simple; the less the training intensity, the more often it can be done without overtraining. In contrast, the greater the training intensity, the less often it can be done if overtraining is to be avoided. If you understand how to apply this simple fact, the majority of people will find that they can train every day without overtraining.

The high frequency training pyramid is based on four different types of training. The four types of training each vary in terms of intensity and will be listed in order from the least intense to the most intense. The four types of workouts include:

1. Light volume and light recovery training
2. Muscle building workouts
3. Explosive speed and power training
4. Heavy single rep training

Obviously, the easiest workouts can be done more often in comparison to the others, and the hardest workout should be done least often. This forms a pyramid of intensities. The bottom of the pyramid indicates the lowest intensity, but it also consists of the widest part which represents the workouts that can be done the most often. As the pyramid rises with more intensity, it also narrows in terms of how often the workouts are done. The top of the pyramid is highest in intensity, but smallest in terms of how often the training is performed.

The underlying principle behind the pyramid is simple, it's easiest to make consistent progress by progressing from the base up instead of the top up. Many lifters have a top up mentality and never take advantage of the simplicity of focusing on adding weight to their easier sets and easier workouts. If you understand how to add correctly to the bottom layer where it is easiest, it will always stay easy even though you keep add weight to it. The end result is that the workouts that correlate with top of the pyramid will naturally rise to a higher level of strength. The rest of the book will explain how to accomplish this.

Chapter 1

How Often To Perform Each Type of Training

The high frequency training pyramid consists of four levels of training intensity that vary from light and easy, to heavy and hard. Since it is high frequency training, the whole body is trained five to six days per week, but the workouts vary in intensity. As mentioned before, the easier the workout, the more often it can be performed without overtraining. In contrast, the harder the workout, the less often it is performed in order to avoid overtraining.

Days per week for each Level of the Pyramid

In the example below, the amount of training that should be done for each level of the pyramid is listed:

Pyramid

4th level: Heavy Single Reps

Once every three weeks

3rd Level: Explosive Speed and Power

Twice every three weeks

2nd Level: Muscle & Bodybuilding Workouts

Once per Week

1st level: Light Volume and Light recovery Training

3 to 4 days per week

Chapter 2

The Training Schedule

In order to help you understand how to structure the layers of the pyramid into a series of workouts, a schedule is shown on the next page. The schedule shows how the different types of training are organized over the course of a week. There are details of the schedule that you may not understand when you see it, but as you continue to read, these details will be explained.

The High Frequency Training Pyramid Schedule

Mondays: Light volume training: 8 sets per muscle group (level 1)

Tuesdays: Light volume training: 8 sets per muscle group (level 1)

Wednesdays: Muscle building workout (level 2)

2 to 4 sets per muscle group x 6 to 12 reps per set

Thursdays: Light recovery training: 4 sets per muscle group (level 1)

Fridays: Light recovery training: 4 sets per muscle group (level 1)

Saturdays: Do a 2 Part Workout:

Part 1: Explosive Speed (Layer 3)

Week 1: Squats and Deadlift

Week 2: Bench Press and Deadlifts

Week 3: Bench Press and Squats

Part 2: Heavy Single Reps (level 4)

Week 1: Bench Press

Week 2: Squats

Week 3: Deadlifts

Two Important Details

Now that you have had a chance to see the training schedule, there are two important details that will be addressed to help you understand the schedule better. These will be addressed in the next chapter.

Chapter 3

Understanding The Training Schedule

Detail #1

Upon looking at the high frequency pyramid training schedule, there are two details of the schedule that won't be clear unless they are explained. The first detail is that the first layer of the pyramid consists of **two types** of light training including:

1. Light volume training

2. Light recovery training

The primary factor that differentiates light volume training from light recovery training is the number of sets that are done for each muscle group.

Light Volume Training = 8 Sets per Muscle Group

In the training schedule that was previously listed, light volume is done at the start of the week and consists of approximately **eight sets per major muscle group** on Mondays and Tuesdays.

Light Recovery Training = 4 Sets per Muscle Group

The amount of sets with light weights will be reduced towards the end of the week. The reduction in sets makes it easier to recover when you reach your heaviest workout which is the last workout of the week. The light recovery workouts will consist of only **four sets per major muscle group** on Thursdays and Fridays.

Detail #2

The second important detail that you must understand is that the third and fourth levels of the pyramid are both done during same workout. In the schedule that was previously listed, explosive speed and power training (which is level 3), and heavy single rep lifting (which is level 4), are both done on Saturdays. The Saturday workout will consist of just three lifts consisting of bench presses, squats, and deadlifts. These three exercises will be divided into **two parts**. As you continue to read, each part will be explained in greater detail.

Part 1: Explosive Speed and power

Part one of Saturday's workout will consist of explosive speed and power training which will be done in conjunction with two out of the three exercises. When doing an explosive speed and power workout, the following routine will be used for the **bench press:**

5 sets x 3 reps @ 60% of training max

4 sets x 3 reps @ 70% of training max

3 sets x 1 rep @ 85% of training max

When doing an explosive speed and power workout for the **squat and/or deadlift**, the following routine will be used for each exercise:

3 sets x 3 reps @ 60% of training max

2 sets x 3 reps @ 70% of training max

3 sets x 1 rep @ 85% of training max

Part 2: Heavy Single Reps

Part two of Saturday's workout will consist of heavy single reps which will be done in conjunction with just one exercise. The exercise will either be the bench press, squats, or deadlifts. You will do whichever exercise was not done in part 1 during your speed workout. The routine that is used for the selected exercise during the heavy single rep portion of the workout is listed below:

1 set x 5 reps @ 50% of training max

1 set x 1 rep @ 60% of training max

1 set x 1 rep @ 70% of training max

1 set x 1 rep @ 80% of training max

1 set x 1 rep @ 90% of training max

1 to 3 sets x 1 rep @ 100% of training max

The Order is Flexible

If you want to reverse the order of part 1 and part 2 by doing the heavy single rep portion the first in part one of your workout, and the explosive speed and power training in the second part of your workout, you may do so. It is not a matter of whether you do the explosive speed training or the heavy single reps first or second, the most important thing is that you do explosive speed work for two exercises per workout, and heavy single reps for one exercise per workout.

Three Week Rotation of Exercises on Saturdays

You will do a three week rotation of squats, bench presses, and deadlifts, so that each exercise gets two explosive speed and power workouts, and one heavy single rep workout over the course of three weeks. An example of how to rotate your exercises throughout a three week cycle is illustrated on the next page.

Layer 3 and 4 Workouts

Parts 1 and 2

Saturday Workouts	
Part 1 Explosive Speed and Power	**Part 2** Heavy Single Reps
Week 1 Squat and Deadlift	**Week 1** Bench Press
Week 2 Deadlift and Bench Press	**Week 2** Squat
Week 3 Squat and Bench Press	**Week 3** Deadlift

After reading chapters two and three, you should have a basic understanding of how to set up a weekly schedule according to the principles of the high frequency training pyramid. The way in which the workouts are ordered is very important because as you will see in the next chapter, a specific strength and muscle building process will result from sequencing your workouts correctly.

Chapter 4

How The Layers Work Together

One of the goals of using the high frequency training pyramid is to strategically order the different layers of the pyramid into a series of workouts that interact with one another to produce a synergistic strength building effect. This can be done by using the different layers of the pyramid to produce four different physiological effects which are listed below:

1. Metabolic acceleration
2. Accumulation of muscle damage
3. Super-compensation
4. High muscle tension at the peak of super-compensation

These four physiological effects must occur in the order listed in order to maximize the strength building process. To help you understand how the layers of the pyramid work together to produce an effective strength building process, each physiological effect must be explained one at a time.

Metabolic Acceleration

The workouts that most directly affect metabolic acceleration are the light volume workouts and the muscle building workout. These workouts initiate the process of metabolic acceleration by stressing the reserves of energy components that are stored within the muscles. The energy components within the muscles consist of glycogen and creatine phosphate which are necessary for the formation of ATP. ATP then serves as the fuel that is used to produce muscle contractions. As the reserves of these energy components are utilized during exercise, the amount that is stored within the muscles begins to dwindle to a lower level.

The body's natural response to the decreased levels of glycogen and creatine phosphate is to increase the rate at which it resynthesizes these energy components in order to reload the muscles with energy both during exercise and while at rest. This process is accelerated when the body is programmed with high frequency workouts as it causes the body to anticipate that it must quickly reload the muscles with fuel to stay prepared for the steady stream of workouts that keep occurring on a frequent basis. This is accentuated to an even greater degree when a significant amount of training volume is used which is what happens when light volume and muscle building workouts are performed. The net effect is that the body activates an increase in capacity to reload its muscles with energy at an accelerated rate.

Muscle Damage

Whereas metabolic acceleration occurs by stressing the energy components within the muscles, muscle damage targets the protein elements of the muscle fibers. The damaged muscle fibers will suffer a loss of protein. The body will work hard to compensate for this by speeding up the rate at which it

resynthesizes protein within the muscle fibers. The more the muscle damage, the more the body will tend to accentuate its ability to resynthesize protein in order to repair and rebuild the damaged muscle fibers.

Muscle damage tends to increase as training volume and load increase. Significant training volume is accumulated during the two consecutive light volume workouts that are scheduled at the start of the week, and even more volume and load will be added during the muscle building workout in the middle of the week. These three consecutive workouts will combine to accumulate significant muscle damage by the middle of the week.

Metabolic Acceleration Plus Muscle Damage

Metabolic acceleration plus muscle damage will both accumulate across the first three workouts of the week. By the middle of the week, the reserves of energy components within the muscles will be challenged and the muscle fibers will have undergone significant damage. In order to compensate for these stresses, the body will be fully activated in terms trying to reload the muscles with energy and rebuilding the fibers through protein synthesis. This will set up the body for the next two steps of a strength and muscle building process. These two steps consist of super-compensation and high muscle tension. Muscle tension will work best when it occurs at the peak of super-compensation.

Super-compensation

Once the body is activated to reload energy and rebuild muscle fibers at an accelerated rate, workouts are cut back to a minimum for two days with light recovery training. The cut back in volume and intensity will only put a small demand on the stores of energy within the muscles. Likewise, the light recovery workouts will only cause a small amount muscle damage. At the same time, there will be a carry-over effect from the first three workouts of the week in which the muscles are still highly activated to reload energy and rebuild muscle fiber tissue at an accelerated rate. Since the loss of energy and protein from the muscles is small during the light recovery workouts, and the muscles are still activated to reload and rebuild themselves at an accelerated rate, the muscles will be reloaded with a surplus of energy and a surplus of protein. **This surplus is called super-compensation**.

The metabolic acceleration and muscle damage phases will occur from Monday through Wednesday, so it's important to understand that super-compensation phase that is to follow will take time and won't happen by Thursday morning. However, as the reloading and rebuilding process continues to carryover at an accelerated rate throughout Thursday and Friday, it will accumulate into a surplus of super-compensation by Saturday's workout. In other words, you will be fully recovered and fully energized when you place your muscles under a high amount of tension in Saturday's workout.

High Muscle Tension at the Peak of Super-compensation

Placing your muscles under a high amount of tension is one of the factors that builds strength and muscle. This will be done through forceful lifting and heavy lifting when doing the explosive speed and power workout in combination with heavy single reps on Saturday. The training volume is purposely

kept low by limiting the number of exercises to the bench press, squat, and deadlift, and by doing a low number of reps per set with a fairly low number of total reps per workout.

One reason training volume is kept low during the high muscle tension workouts is to promote a continuation of super-compensation after the workout. The goal of this is to enhance recovery. Remember that you want the tension within each rep to be high, but the over-all workload and energy expenditure of the workout to be kept fairly low. Ideally, your muscles should still be experiencing a surplus of reloading and rebuilding both before and after the two part workout on Saturday. The over-all effect will be an increase in strength and muscle mass.

A Summary of the Process

It may help to summarize the strength building process described in this chapter into a single paragraph as follows:

Light volume workouts and bodybuilding workouts are performed over the first three days of the week. These three workouts combine together to produce metabolic acceleration and the accumulation of muscle damage. This activates the body to reload and rebuild the muscles at an accelerated rate during the light recovery workouts on Thursdays and Fridays. Since this is combined with a low demand on energy and protein synthesis during the light recovery workouts, the accumulation of energy storage and protein synthesis will super-compensate into a surplus of energy and added muscle by Saturday's workout. The body should be at the peak of super-compensation during this workout in which a high amount of tension will be applied to the muscles through heavy single reps and explosive speed and power training. At the same time, it is a low volume workout in order to facilitate the continuation of super-compensation and maximize recovery. Bigger stronger muscles will result.

Knowing the information in this chapter will help you to understand how the individual layers of the pyramid can work together to maximize a strength building effect. Of course in order to take advantage of this, you must understand the details of how to perform the workouts that make up each layer. This will be discussed over the course of the next several chapters.

Chapter 5

Light Volume and Light Recovery Training

The base of the high frequency pyramid consists of light volume training and light recovery training. Remember that the less intense the training is, the more often you can do it. This is why these two forms of light training are done more frequently than the training that makes up the other layers. As you continue to read, you will discover how to perform each type of light training and learn why it is beneficial to include light training in your workout schedule.

Use 25% to 35% of Your Single Rep Max

Not surprisingly, light volume training must be done with light weights consisting of 30% to 35% of your single rep max for upper body exercises, and 25% to 30% of your single rep max for all types of squat and deadlift exercises. The term single rep max refers to the maximum amount of weight that you can lift for a single rep of an exercise and is often the basis for calculating the amount of weight that is to be lifted for an exercise. For example, if the maximum weight you can lift for the squat is 300 pounds, and the workout listed requires you to use 30% of your maximum squat, then you would workout with 30% of 300 pounds which would equal 100 pounds.

Light Volume Training: 8 Sets x 10 Reps

Light volume training is very simple, you will use light weights while doing 8 sets of 10 reps for each major muscle group including:

1. The chest muscles
2. The back muscles
3. The legs, glutes, and lower back muscles

The light volume workout consisting of 8 sets of 10 reps will be divided into two identical parts:

Part 1: 4 sets x 10 Reps: 20 Second rest between sets

To start part one of your workout, four consecutive sets should be done for the same muscle group with no more than twenty seconds rest between each set. After doing four sets for the same muscle group, move to a second muscle group and do four sets. Repeat this until you have done four sets for each of the three major muscle groups. This will equal a total of twelve sets for part one.

Part 2: Repeat 4 Sets x 10 Reps for each muscle group

Once four consecutive sets have been done for each major muscle group, repeat the sequence by doing four sets for each major muscle group again.

Avoid Excessive Fatigue

The reason that you will not do eight consecutive sets for the same muscle group is to avoid creating excessive fatigue within your muscles. For example, when you do four sets for your chest and switch to four sets for your back, your chest muscles are getting a chance to recover before doing another four sets with only twenty seconds rest between sets. The rest period between each group of four sets for the same muscle group is less taxing than doing eight consecutive sets with only twenty seconds rest between sets. Layer one should not be a high stress workout. When high stress workouts are done too frequently it leads to adaptive resistance. This will be explained more in chapter eight.

Light Recovery Workouts: 4 sets x 10 reps

Light recovery workouts are done almost exactly like light volume training workouts except that you only do four sets of ten reps for each major muscle group instead of eight sets of ten reps. A light recovery workout is simply half of a light volume workout. You will basically just do part one of a light volume workout and then stop without ever doing part two.

Light recovery workouts are active recovery workouts that keep your nervous system activated and prepared for the heavier workouts that follow. These recovery workouts are intended to have somewhat of a physical therapy effect. There should be a mild increase in blood flow to the working muscles combined with the gentle stretching and contracting action of the muscles to promote healthy muscles and connective tissue around the joints.

Light Recovery Workouts Are Optional

Even though light workouts are designed to facilitate recovery, you may feel that you can recover better without them by replacing them with rest days. If you experiment by omitting the light recovery workouts from your training schedule and respond to your workouts better without them, then you can continue to omit them. In other words, the light recovery are optional according to what seems to work best for your body.

If you experiment by including the light recovery workouts for a few weeks and then exclude them for a few weeks, and you don't feel any great difference between the two, I would continue to include them. Remember that even a small amount of exercise that is done on a regular basis will lay the foundation for preparing your body for a time when you want to add just a little more. You then stick with what you have added until your body learns to handle it better and is prepared to handle a little bit more again. When this process is repeated over the long term, gradual additions of weight will add up to a lot over time. It won't be noticeable after the first week, or the first month, and it may only be moderately noticeable after a year, but what seems to only make a small difference over the course of a few months will accumulate until it makes a big difference over the course of years.

Chapter 6

Exercise Selection for Layer 1

The exercises that you choose for light volume and light recovery training are based on your goals and preferences, but my recommendation is to stick with basic compound exercises. This means to focus on exercises such as:

Chest and Shoulder Exercises including:

Bench presses, incline presses, and overhead presses with barbells and dumbbells.

Back Exercises including:

Bent over barbell rows, T- bar rows, seated pulley rows, and lat pulldowns.

Leg Exercises including:

Regular barbell squats, front squats, goblet squats, belt squats, leg presses, conventional deadlifts, sumo deadlifts, and Romanian deadlifts. These exercises will also build your glutes, hips, and lower back.

After reading the list of these exercises, please note that you wouldn't do all the chest exercises in the same workout, you only need to do one chest exercise per workout. Likewise, you only need to do one exercise for your back and leg muscles. However, you are allowed to do more than one exercise per muscle group if you want to. The important thing is to do eights total sets for chest, eight total sets for back, and eight total sets for legs.

Optional Exercises

You may think that the exercises listed won't adequately work the smaller muscles such as your biceps, triceps, deltoids, abs, and calves. If this is the case, you can add in 4 sets of 10 reps of exercises that include any variation of curls for biceps, triceps extensions for triceps, dumbbell raises for deltoids, calf raises for calves, and ab exercises for abs. However, remember that the smaller muscles such as biceps, triceps, deltoids, and abs will all receive a substantial amount of work from assisting the bigger muscles when doing basic compound movements. Triceps and deltoids will be stimulated during pressing exercises for the chest and shoulders, biceps will be stimulated when doing pulling exercises for the back, and abs will act as stabilizing muscles that assist with the performance of all types of squats and deadlifts.

Variations of The Same Exercise

Many lifters believe that they must do a lot of different exercises for each muscle group in order to maximize the strength of each muscle group. The good thing about using light weights is that you can do several variations of the same exercise without worrying about losing control of the weights if you don't use the exact lifting groove or lifting motion that is used for heavy lifting. Light weights are generally safe to use even when your body or the bar may be in a position that is different than what is optimal for heavy lifting. I bring this up because you can choose just one exercise for each muscle group and use several variations of that same exercise within the same workout. Some examples will help to clarify how this works.

Bench Press Variations

When doing bench presses for your chest, you can utilize several variations of bench presses by changing the spacing of your hand width from set to set, and by lowering the bar to different locations such as the lower chest, mid chest, upper chest, or even a little below your chest. In this example, you are doing one exercise, but you are doing it in a variety of ways from set to set in order to affect your chest muscles, triceps, and deltoids in different ways.

Pull-down Variations

When training your back muscles, you can choose just one exercise such as lat pulldowns and change your hand spacing and the angle of your upper body. For example, you can do lat pulldowns with a wide grip while your upper body is straight up and down, and you can also do lat pulldowns with a narrow grip while leaning back at a 45 degree angle. The result is that one exercise will benefit your back muscles in a variety of ways.

Back Squat Variations

When training legs, hips, and lower back, you can choose just one exercise such as barbell back squats and do them with a wide, narrow, or medium width stance. You can also vary the angle of your upper body by doing high bar squats in a very upright position, and you can also utilize a more normal squat position. For even more variation you can squat while bent over in a very pronounced manner as you

would when performing a set of good mornings. The variations will stress your thighs, glutes, hips, and lower back in different ways.

Utilizing Different Exercises

Each lifter is going to have their own preferences. Some lifters would rather not do different variations of the same exercise because they want to master a specific lifting groove that never changes; a groove that they always use for a specific exercise. Rather than doing variations of the same exercise, these lifters may prefer doing a variety of different exercises. Since the light workouts are done three to four days per week, it gives ample opportunity to switch exercises from workout to workout. In other words, you could do flat benches in one workout, low incline benches in the second workout, high incline benches in the third workout, and overhead presses in the fourth workout of the week. Likewise, pulling motions can also be done from different angles in every workout, and you could do different leg exercises such as back squats, front squats, goblet squats, and belt squats in different workouts within a week if you wanted to.

Chapter 7

What Is the Purpose Of Light Workouts?

For the most part, you don't read or hear about many strength training programs that advocate the use of lights weights that are only 25% to 35% of your single rep max. This being the case, many people who read this will probably wonder why this type of training would be included in a strength training program. In other words, do light weights have any ability to contribute to strength gains? My answer is yes.

First of all, I want to point out that you must remember that light weights are only one type of training that you will be doing, and the workouts with light weights are designed to work together in conjunction with the other types of training that will be done to produce an overall effect that leads to strength gains. What then are the benefits of using light weights for a strength training program?

Increased Muscle Size

Believe it or not, some of the latest research by Stuart Phillips and Brad Schoenfeld indicates that muscle can be built with a wide spectrum of weights and rep ranges. In fact, their research showed that when you compare workouts that are done with light weights to workouts that are done with heavy weights, there is very little difference between the two in regard to the amount of muscle growth that the workouts produce. Even when the test subjects trained exclusively with weights that were as low as 30% to 50% of their single rep max, they developed as much muscle as those who used heavier weights that were 75% to 90% of their single rep max.

The research did show a difference in strength when comparing the use of light weights to heavy weights as those who used heavy weights gained more strength. However, in the case of Stuart Phillip's study, when a single rep max effort lift was added once every three weeks to the subjects who were using 30% to 50% of their single rep max in all of their other workouts, there was no difference in the amount of strength gained when comparing heavy workouts to light workouts. In other words, when those who trained with light weights added in one heavy rep once every three weeks, it made up for the lack of improvement in strength.

The point of this is that the use of light weights is one of the elements within the frequency pyramid that can enhance the development of muscle size. When you combine it together with the use of the other types of training in the pyramid that are done with heavier weights, you get both size and strength.

At this point it is very important to acknowledge that Stuart Phillips specifically pointed out that his study was based on pushing the test subjects to a point of fatigue on each set. In other words, the test subjects did sets consisting of a lot more reps than what I am advocating in the high frequency training pyramid as each set of light volume and light recovery work only consists of ten reps. However, this is offset by the fact that eight total sets of ten reps will be done for each major muscle group. Of course

this amounts to eighty total reps which is a lot of reps, but they are not high stress reps in terms of causing severe fatigue.

If I were to recommend two sets of forty reps for your light volume workouts, it would create a high amount of stress and fatigue. Most people would burn out from forty reps per set on a high frequency basis and it would probably rob them of energy for the other types of workouts. This is why only ten reps per set are recommended in order to place a milder stress on the muscles that will stimulate your muscles without annihilating them.

Weekly Volume and Workload for Muscle Mass

One of the important findings in Schoenfeld's research is that regardless of whether heavy weights or light weights are used, sufficient total training volume per week plays a significant role in producing maximum gains in muscle mass.

Once again, when you do eights sets of ten reps, it adds up to eighty reps for each major muscle group. The light recovery workouts will add up to forty reps per major muscle group. When you combine two workouts of eighty reps per major muscle group, and two workouts of forty reps per major muscle group, it will add up to a weekly total of 240 reps per major muscle group. The bottom line is that these workouts will add a significant amount of training volume to your weekly workload.

The goal of the light workouts is to maximize the amount of weekly training volume without creating so much stress in your workouts that it causes overtraining or detracts from the heavier workouts that are done each week. One of the advantages of these high frequency light workouts is the reliability in which they lend themselves to gradual progressions in weight over time without encountering a training plateau.

Chapter 8

Avoiding Adaptive Resistance

Gradual Progression = Easy Adaptation

One of the benefits of the light volume training is that it can be done in a progressive manner through gradual additions of weight. These gradual additions of weight will barely be noticeable at the end of the month, but they will add up by the end of a year, and they can really add up over the course of several years. In the end, the systematic addition of weight at the bottom of the pyramid will make it easier to add to the heavier weights that are used as you move up to higher levels of the pyramid.

1 Pound Every Two Weeks = 25 Pound per Year

If you simply add one pound to your lifts every two weeks when doing light volume and light recovery training, it will add up to twenty-five pounds in a year.

25 Pound per year = 100 Pound in 4 years

If you add twenty-five pounds to your lifts every year, it will add up to 100 pounds in four years. If you have the patience and discipline to consistently stick with light volume and light recovery training, and you systematically add weight in a gradual progressive manner, it makes all the sense in the world to do it.

The Wrong Concept

Perhaps you are thinking that the strategy is to start out with light workouts that feel pretty easy, and you keep adding weight on a gradual basis until the workouts become hard. This is completely the wrong concept.

The Right Concept

The right concept is to start out with light workouts that feel pretty easy, and as you gradually add weight over time, the workouts never get hard, they always stay easy. In other words, if you add weight at the right rate, you will gain strength, and as you gain strength, gradual additions of weight do not become harder to lift.

Don’t Panic

If you look at the light workouts by themselves without considering how they fit in with the rest of the heavier workouts, you may start to panic with the thought that it will take you forever to get stronger. If you have these thoughts, just remember that the proper use of light weights is designed to promote long term progress, but the short term perspective is also a vital part of the high frequency training pyramid. Don’t forget that the other three layers of the pyramid include more intense training that will help you to make quick gains if you are at a stage where you have the capacity to do so. The longer you

lift, the harder it is to make rapid gains. Simply pushing yourself harder may work wonderfully when you start out as a beginning lifter, but it will often backfire as you gain more and more strength.

Limited Adaptive Capacity and Adaptive Resistance

Hard training will put your body under a lot of stress that tends to promote big adaptations in the form of quick strength gains. However, your body does not have an infinite capacity to keep responding to high intensity stresses with big rapid adaptations. Sooner or later you will face what is known as ***adaptive resistance*** to training stresses that surpass your adaptive capacity.

Easy Adaptation with Light Volume Training

The good news is that when your body runs out of adaptive capacity to keep making difficult adaptations in the form of big, rapid strength gains, it still has the capacity to make easy adaptations consisting of smaller strength gains that occur at a slower rate. This is why the frequent use of light volume and light recovery training is used.

The heavier training sessions that are included as a part of the higher levels of the pyramid are applied less often in proportion to the difficulty of the training stress. This must be done to minimize adaptive resistance. At the same time, the heavier training sessions can't be neglected as they are an important factor in terms teaching your nervous system to fire in a forceful manner. This basically means that heavy lifting will teach your muscle fibers to contract collectively and simultaneously. Without muscle fiber recruitment that produces simultaneous muscle fiber contractions, your muscles will not be at their strongest in proportion to their size. The bottom line is that light weights and heavy weights are both important, but since heavy weights tend to produce a high amount of momentary stress, they are used less often.

Chapter 9

Additional Benefits of Light Volume Training

Conditioning and Readiness

You will find that the steady use of light volume and light recovery training will keep your body in a state of readiness to engage in the other types of training that are heavier and more stressful. The overall health of your muscles, joints, tendons, and ligaments will tend to benefit from the use of light weights. Likewise, your overall workload capacity will tend improve because of the regular conditioning effect that is produced by light volume and light recovery training. You will find that as your condition improves, the harder workouts will be less taxing, and if you use plenty of exercise variation within your light volume and light recovery workouts, it will build up the strength and size of the underdeveloped aspects within each muscle group and reduce the risk of injury.

Metabolism and Weight Gain

The consistent use of light volume training will to stimulate your metabolism and is likely to stimulate your appetite. Admittedly, metabolic stimulation may have a negative effect on your ability to gain weight if you already have a super-fast metabolism, but if you have a more normal metabolic rate, the stimulation of your metabolism and appetite can enhance your ability to gain weight.

Programming for Super-compensation

The power of light volume training to accelerate your metabolism at the start of the week is the basis for setting your body up to super-compensate with a surplus of protein synthesis and energy storage within your muscles when volume is reduced at the end of the week. This can be a powerful contributor to the strength building process and is a major reason why the use of light weights is such an important part of the high frequency strength training pyramid.

Chapter 10

Gradually Work Into It, Don't Jump Into It

The first time you do a light volume workout, it may feel so easy that it could leave you wondering if the workout had any effect on your body at all. However, you must remember that the workouts are done frequently and they will have a cumulative effect. As easy as the workouts may seem at first, they can accumulate to the point where you suddenly feel wiped out all of the time.

If you are new to high frequency training, or you are new to volume training, I suggest working your way into the workouts by doing layers two, three, and four of the pyramid according to the schedule listed in chapter 1, but only train with light weights once per week instead of four times per week. This will amount to three workouts per week as follows:

Monday: Light volume training (level 1)

8 x 10 @ 25% to 35%

Wednesday: Muscle building workout (level 2):

2 to 4 sets x 5 to 12 reps

Saturday: Speed and heavy single rep training (level 3 & 4)

Part 1 start with 60% of training max and work up to 85%

Part 2: work up to 100% of training max

After two to three weeks you can add to your weekly workouts by doing two light volume training sessions per week. Do this for at least two weeks and take as long as necessary before adding more. Any time you feel wiped out from adding in an extra workout, reduce back to your previous schedule until you have recovered. When you feel ready, you can try adding in a couple of sets at a time instead of a whole workout at a time. Keep adding in sets and workouts as you feel ready until you can follow the schedule in chapter one.

Adding in the light volume and light recovery workouts is a conditioning process just like any other form of exercise. You wouldn't start out by trying to run 20 miles per day or 100 miles per week if you have never done any running before. The same concept is true with weight training, you must work your way into it. If you immediately jump into high frequency or high volume training even though you have never done it before, it may completely backfire and you'll be tempted to think that high frequency training doesn't work at all, when the real problem is that you must work your way into it slowly in a reasonable manner. Listen to your body; give it time to adapt to an increase in frequency or an increase in volume. It may take a while, but with patience you will eventually reach a point where the workouts are easy to handle.

Chapter 11

Adjustments and Personal Capacity

Adjust by Doing More if Necessary

The amount of sets that are suggested for the light volume workouts is eight sets of ten reps with approximately 30% of your single rep max. Your goal is to condition yourself to the point where you can include two of these workouts plus two light recovery workouts within your weekly training. However, nothing is written in stone. Most of us fit into a norm for the amount of sets and reps we can handle, but your personal workload capacity may be larger than average. If so, feel free to do more than eight sets of light volume training for each major muscle group. However, don't do more just to do more, only do more if it proves to be beneficial in terms of strength gains.

Adjust by Doing Less if Necessary

While there will always be people who have a larger capacity than normal in terms of the number of sets that are optimal, the opposite is true as well; eight sets may be too many for some people. If so, cut back on the number of sets. It is also possible that you give yourself a full year to work your way up to two light volume and two recovery workouts per week in addition to the heavier workouts, but even after a year of conditioning, it's just too many workouts. The biggest guys who can lift very heavy weights are often the most vulnerable to overtraining because of the amount of weight they lift each workout. Some lifters may be better off by completely cutting out the light recovery workouts, or by cutting back on the number of sets for their light workouts. If you need to cut back on the volume or frequency of your workouts, do so until you find the right amount of training that provides the best stimulus for strength gains.

Train According To Your Personal Capacity

Everything that is written and discussed in terms of how many sets and how often to train can be adjusted to fit your own individual capacities for effective training. If you have to cut back, then cut back. You may find that you can gradually add on after you cut back. If the suggested training is not enough, then add more according to the amount that has the most productive training effect. Light volume and light recovery training will work if you adjust it to your personal capacity.

Chapter 12

Muscle Building Workouts

Every layer of the frequency pyramid will have various degrees of influence on muscle growth, but the layer that is specifically designed to produce the greatest influence on muscle growth is layer number two. Of course the exercise intensity increases as you move up the pyramid, so you will be pushing each set significantly harder in layer two than layer one.

Since the main objective of layer number two is to build muscle, exercises that promote the most muscle growth should be included in this layer. Exercises such as squats, bench presses, rowing motions, and variations of these exercises are excellent for promoting overall muscle growth, however, layer number two is also designed to allow plenty of freedom to develop any part of a muscle group that you need to build up.

Exercises for Building Pectorals

If you feel like your triceps and deltoids are doing most of the work when you do bench presses and incline presses**,** and you want to build up your pecs more, you can do isolation exercises such as **dumbbell flies, cable flies, and pec deck flies** in order to build your pecs. You can also do **dumbbell bench presses** (flat or incline) while emphasizing a deep stretch at the bottom and a tight squeeze at the top.

Exercises for your Trapezius and Deltoids

If you want to build up your traps and deltoids more, the workouts in layer two are where you would include **shrugs, upright rows,** and **dumbbell raises to the side, front, and/or back**.

Exercises for Legs, glutes, and Lower Back

Leg extensions can be included to build up the quadriceps muscles in the front of the legs, and **leg curls** can be included to build up the hamstring muscles in the back of the legs. **Hyperextensions** and **reverse hypers** can be utilized in your workouts to build up your lower back, glutes, and hamstrings.

Biceps and Triceps

I strongly recommend that you include specific exercises for biceps and triceps during your layer two workouts. Choose any type of **curls** for your biceps and any type of **triceps extensions** for your triceps.

Basic Exercises Plus Freedom to Choose

My suggestion is that before you do any isolation exercises that are designed to target a specific muscle group, do at least one set of bench presses, rows, and squats, or variations of these basic compound exercises in order to activate overall muscle growth. While you can completely focus on benches, rows, and squats if you want to, you also have the freedom to do additional exercises that build up any part of your body that you want to focus on for layer two.

Do 6 to 12 Reps per Set

The basic rep range that should be used for the muscle building workouts is six to twelve reps per set. My basic preference for muscle building workouts is to do one or two sets of six reps and to finish with one set of twelve reps for each muscle group. However, you may prefer one specific rep range that you have found to be the most effective for muscle building workouts. You may also prefer to increase the weight over a three week period by doing ten reps the first week, eight reps the second week, and six reps the third week.

Controlled Intensity

The high frequency training pyramid is based on how frequently various intensities should be used. The harder the workout, the less often you do it. The muscle building workouts in level two of the pyramid are not the top level of intensity. High intensity training on a frequent basis is not necessary, nor is it optimum for long term progress; **controlled intensity is much better**.

What is controlled intensity in layer number two? It means to push your sets as long as you can maintain perfect form and maintain the same rep pace from one rep to the next. When your rep speed starts to slow down, or you reach a point where you start to take a longer pause between reps in order to gather your strength for the next rep, it is time to stop the set. Do not do any more than one rep at a slower speed than the previous reps of a set, and altogether avoid slow, strenuous, grinder reps that may occur when pushing a set as hard as possible.

Generally 2 to 4 Sets per Muscle Group

When using high frequency training, it is important that each muscle group is trained according to the number of sets that you can repeat at full strength. In the minds of many people, a muscle building workout should consist of ten or more sets per muscle group, but that would be too many sets in the context of high frequency training. Remember that you will be accumulating a lot of training volume from all of the other workouts throughout the week, so packing a lot of sets and volume into a single workout is not necessary. Most people should do about two to four work sets per muscle group as this is the amount of sets that most people can repeat while remaining at full strength.

It is important to point out that the recommendation to do two to four sets does not include warm up sets where you are not pushing very hard to do the intended number of reps, it only refers to work sets where you are pushing yourself to do as many even paced reps as possible. This means do your warm up sets plus two to four work sets for each muscle group.

The most work sets that I have ever observed anyone do for the same muscle group while remaining at full strength for every set is eight sets. This is an exceptionally high capacity, but even if you are a rare individual who has the capacity to do a large number of work sets at full strength, it may still be too many in the context of high frequency training, which is why four sets would generally be the upper limit of sets that I would recommend for a muscle group in layer two.

Rest a Muscle Group at least 3 Minutes between Sets

In order to remain at full strength for each set when doing layer two workouts, it is vitally important to rest at least three minutes between sets for the same muscle group. If you don't rest a muscle group long enough between sets, you will already start to lose strength by your second set when you actually have the ability to do more sets at full strength by resting longer between sets.

Alternating between Unrelated Muscle Groups

Even though you should rest a muscle group for at least three minutes between sets, this does not mean that you must sit there and do nothing for three minutes. After doing a set for your chest muscles, you may do an exercise for your back muscles during the three minute time period in which you are resting your chest muscles. Likewise, after doing a set for your back muscles, you may do an exercise for your chest muscles during the three minute time period in which you are resting your back. This has the potential to cut your workout time in half!

Some people would rather not alternate back and forth between muscle groups; they would prefer to train each muscle group one at a time which is perfectly fine. However, those who prefer alternating back and forth between muscle groups should do so on the condition that they alternate back and forth between muscle groups that are unrelated in terms of their function.

Exercise Combinations That Work

Examples of unrelated muscle groups that can be paired together when alternating back and forth between exercises include:

Chest and back

Upper body and lower body.

Exercise Combinations That Should be Avoided

Make sure to avoid alternating between isolation exercises for smaller muscle groups and basic compound exercises that utilize those same smaller muscle groups. For example, if you alternate back and forth between triceps extensions and bench presses, your triceps are included in both exercises. Because of this, your triceps will quickly become weakened by fatigue much faster than your chest muscles. This will cause your triceps to give out when doing a set of bench presses before your chest muscles receive an adequate workout. The same problem will occur when alternating between biceps exercises and pulling motions for the back. Your biceps are included in both exercises which will cause them to give out when doing pulling motions before your back muscles ever get a decent workout. You should avoid alternating back and forth between the following muscle groups or exercises:

Do not alternate pressing exercises with triceps exercises.

Do not alternate pulling motions with biceps exercises.

You will also find that alternating between leg extensions and squats will interfere with your squat performance. However, bodybuilders sometimes alternate between squats and leg extensions on purpose to make their quads work harder than normal while squatting. If you find that this method is beneficial for building up your leg muscles, then feel free to do it.

Chapter 13

Explosive Speed Workouts

Explosive speed workouts are a step up in intensity from the bodybuilding workouts. You could easily argue that the overall demand of a bodybuilding workout is greater if you happen to do more exercises and more total sets and reps for your bodybuilding workouts than your speed workouts. However, if we primarily focus on the amount of momentary tension that is placed upon the muscles within each rep performed, the intensity will be greater when performing explosive speed workouts. This is why it is limited to two workouts every three weeks.

Amount of Weight = 60% to 85% of your Training Max

When doing explosive speed work, the objective is not to lift as much weight as possible, but to make a deliberate effort to impart maximum force and speed into each rep without sacrificing good form. This is done while using poundage's that ranges from 60% to 85% of your training max.

What is a Training Max?

Since the amount of weight that you will be using for each set is based on percentages of your training max, you must know what is meant by the term, "training max." Your training max is the amount of weight that you will use when doing your heaviest single reps in layer four. Your heaviest single reps are based upon using as much weight as possible within in the context of maintaining a smooth nonstop lifting motion with excellent form. If there is a hitch in your lifting motion and you start to slow down or stall in the middle of a single rep before completing the lift, you are exceeding your

training max. Your training max should consist of a weight that allows a sold lift with excellent form and a smooth nonstop lifting motion.

The workouts on speed day are not complicated. You simply focus on two out of the three powerlifts and you do some explosive lifting for each exercise. The amount of sets and reps for explosive speed benching are as follows:

Bench Press

5 sets x 3 reps @ 60% of training max

4 sets x 3 reps @ 70% of training max

3 sets x 1 rep @ 85% of training max

Since there is a lot of crossover in regard to the muscles used for the squat and deadlift, a smaller number of reps are done in comparison to the bench press. The squat workout consists of eighteen total reps and the deadlift workout is identical in terms of sets and reps. You can see this in the explosive speed and power workouts that are listed for the squat and deadlift:

Squats

3 sets x 3 reps @ 60% of training max

2 sets x 3 reps @ 70% of training max

3 sets x 1 rep @ 85% of training max

Deadlifts

3 sets x 3 reps @ 60% of training max

2 sets x 3 reps @ 70% of training max

3 sets x 1 rep @ 85% of training max

Different lifters have different styles when training for explosive lifting. Some lifters prefer doing every rep of a set in rapid succession with no pause in between reps; other lifters prefer to pause at the top of the lift between each rep, and some may even want to pause at the bottom and then explode. Use whichever method that you prefer, but the essential ingredient in explosive speed lifting is to impart as much force as possible into the bar in order to produce maximum upward rep speed for each rep.

When training with explosive force on each rep, it's easy to forget about using good form. Make sure that both your body and the bar are under control at all times. Your body should always be in ideal position for maximum leverage throughout the lift, and the bar should always be moving within an ideal lifting groove to produce an ideal lifting motion. The goal is to lift with as much speed as possible without sacrificing optimum lifting form.

Work Your Way up To Fast Reps

If you are not already including speed training in your workouts, I recommend starting out with caution. Lifting with maximum force can put a stress on your muscles and joints that they may not be accustomed to. Don't risk injury by suddenly imposing a stress on your body that it may not be prepared to handle. Get the feel of lifting forcefully with control by using an unloaded barbell if necessary. Do as many sets of three to five reps as necessary with a very light weight until you feel like you can lift with force and control.

When you have the feel of using very light weights with both speed and control, add some weight until you reach your intended workout weight. However, make sure that you only increase the weight as long as you can meet two conditions, the first is that you are not experiencing any pain or vulnerability to injury during the lifts, the second is that you can still maintain excellent form with the weight you are using. If you feel discomfort, go back to your normal lifting speed and try to gradually add more speed and force to your lifts over the course of several workouts. Likewise, if your form begins to break down, slow down to the point where you can lift with excellent form and gradually add more speed and force as long as you can maintain perfect form.

When done properly, you will find that lifting with force and speed will begin to enhance your strength when using heavier weights in layer four of the pyramid.

Chapter 14

Heavy Single Reps

The top layer of the pyramid consists of the heaviest workouts. Since the heaviest workouts tend to create the most stress on the nervous system, joints, and skeletal structure, they are done the least amount.

Heavy workouts are very simple; you will just do one exercise for heavy single reps each workout. The exercise you perform will either be bench presses, or squats, or deadlifts. All of the variations in exercise form for building up weaknesses are emphasized in layers one and two. In contrast, I recommend that you concentrate on using the exercise technique that enables you to lift the most amount of weight when doing your heaviest workouts. The exact technique that is used for each exercise will vary from person to person due to two main reasons:

The first is that individuals vary in terms anatomical leverages. All this means is that different people have legs and arms that are either long, short, or proportionate relative to the rest of their body. Likewise, there are individual differences in hip and ankle mobility. Not only do lifters vary in terms of their anatomical structures and leverages, they also vary in terms of which muscle groups are the strongest.

Short Legs Plus Strong Quads = Upright Squat and Sumo Deadlift

Some lifters derive most of their squatting strength from their quadriceps while others rely much more upon the glutes, hips, or lower back. When you combine this with the various differences in anatomical leverage, a lifter who has short legs and is strongest in their quads will probably prefer an upright squatting style and the sumo deadlift.

Long Legs and Strong Lower Back = More Forward Lean & Conventional Deadlift

In contrast, a lifter who has long legs and is strongest in their lower back will tend to have more forward lean as opposed to an upright style when squatting, and they are likely to prefer the conventional deadlift instead of the sumo deadlift.

Pec Dominant: Elbows Flare out to the side more When Benching

Those who are more pec dominant will tend to flare their elbows out to the side more when doing bench presses.

Triceps Dominant: Elbows 45 to 60 Degrees

Those who have very strong triceps plus a deep rib cage and substantial arch when they bench are more likely to keep their elbows at a 45 to 60 degree angle to their bodies, and they are more likely to press in a straight line over their lower chest.

The lifting form that enables you to use your body structure and muscle group strengths to greatest advantage is the form you should use for your heavy workouts. Use the lighter layers to provide exercise variations and build up weaknesses.

The amount of sets, reps, and weight that you should use for each lift is very simple and consists of the following for bench press, squats, and deadlifts:

All Powerlifting Exercises

1 set x 10 reps @ 30%

1 set x 5 reps @ 50% of training max

1 set x 1 rep @ 60% of training max

1 set x 1 rep @ 70% of training max

1 set x 1 rep @ 80% of training max

1 set x 1 rep @ 90% of training max

1 to 3 sets x 1 rep @ 100% of training max

Once again, your training max should be done with a weight that allows you to use a smooth nonstop lifting motion with excellent form. If you feel like one heavy lift is sufficient, you can stop with one rep, but you can do as many single reps as you feel comfortable doing as long as you remain at full strength. If your lifting speed starts to slow down and your form begins to suffer, stop. In general, most people will be able to do between one to three heavy singles at full strength. This will vary from person to person and may also vary according to the lift that you are performing.

Chapter 15

Progression: Add Weight At The Right Rate

Progression simply refers to the ability to add weight to your lifts over time. If you are an easy gainer and you are in the beginning or intermediate stages of weight training, you may be able to add five pounds or more to your lifts every week. However, if you add five pounds per week for a whole year, it would add up to an additional 250 pounds by the end of the year, which only a small percentage of people are able to accomplish. Most lifters cannot add five pounds of weight every week for more than a few months which is why I am a firm believer in micro-loading.

Micro-loading

Micro-loading refers to adding weight to your lifts in small increments of a pound or less. It is much easier for your body to adjust to smaller additions of weight than larger additions of weight. If you are serious about making long term strength gains on a consistent basis, I strongly recommend that you obtain at least ten very small weight plates that only weigh a half pound each. These small weight plates are called, "**fractional weight plates.**" They are hard to find at sports stores or department stores, but they are easy to find online by typing the words, FRACTIONAL WEIGHT PLATES into a search engine. This should lead you to several choices of fractional weight plates that you can purchase online.

When you have fractional weight plates, you can add a pound to your lifts every week which adds up to fifty pounds per year. A fifty pound strength gain in a year is quite substantial. Lifters often gain this much or more each year during their first three years of weight training. After that, it is more reasonable to shoot for strength gains of twenty to thirty pounds per year. In five years it will add up to a lot of weight and it will keep on adding up if you continue year after year. Gains of twenty to thirty pounds per year may not sound like much, but after making some initial quick gains, that's exactly what Ed Coan did year after year to become one of the greatest powerlifters of all-time. In other words, you will probably make some quick gains at some point during your first few years of lifting, but once your progress starts to slow down, you can accomplish a lot by simply adding one pound to your lifts every other week. It will add up to 100 pounds in four years.

Adding Weight in 5 Pound Increments

If you don't have fractional weight plates or you choose not to use them, you must decide how often you can add weight in five pound increments. It helps to think through how often you need to add five pounds according to a goal for how much strength you want to gain in a year.

Five pounds every three weeks will add up to 85 pounds in a year

Five pounds every four weeks will add up to about 65 pounds in a year

Five pounds every five weeks will add up to about 50 pounds in a year

Five pounds every six weeks will add up to about 40 pounds in a year

Five pounds every seven weeks will add up to about 35 pounds in a year

Five pounds every eight to nine weeks will add up to about 30 pounds in a year

Five pounds every ten weeks will add up to about 25 pounds in a year

Five pounds every twelve weeks will add up to about 20 pounds in a year

You can set a goal for how much weight you want to add on by the end of a year, but the key to adding weight without hitting a plateau is to add weight while maintaining the ability to use excellent form on your exercises. In addition, you should still be able to maintain a steady even rep pace throughout each set, and a smooth nonstop lifting motion when performing your heaviest single reps. If you cannot add weight within the context of these guidelines, you are adding weight too fast and should cut back by five to ten pounds. You can then proceed with the process of adding weight on a regular basis as long as you can do so without violating the ability to maintain good form, an even rep pace, and a smooth nonstop lifting motion.

The guidelines for how hard to push yourself for each layer of the pyramid will affect the strategy that you use for adding weight. The ability to identify how much and how often to increase weight needs to be discussed for each layer and will be addressed in the next several chapters.

Chapter 16

Progression With Light Workouts

The light volume and light recovery layer is specifically designed to permit you to add weight according to a predetermined schedule. As you keep adding weight to the light workouts, you will find that it will be easier to add weight to the heavier workouts in layers two through four. Many people will think that the real reason that it is possible to keep adding weight to the bottom layer is actually a result of gaining strength from layers two, three, and four. This may be true to a degree, but if you eliminate the bottom layer with light weights, and only used the top layer with the heaviest weights, you will be at risk for eventually getting stuck. However, if you stopped adding weight to the heavier layers of the pyramid, and only added weight to the bottom layer, you would find that your strength would keep on gradually increasing for a very long time.

My suggestion for adding weight to your light volume training is that you select one of three options including:

Add 1 pound every other week which = 25 pounds per year

Add 1 pound two out of every three weeks which = 35 pounds per year

Add 1 pound every week which = 50 pounds per year

If you add a pound twice every three weeks or once per week, it may cause your light training percentages to rise well above the recommended 25% to 35% for light volume and light recovery workouts. This is ok as long as you eventually reset your poundages. You can do this by recalculating your percentages according to your single rep max at the end of each year. The weights should be readjusted to make sure you are using 25% to 35% for your light volume workouts. The reason you should do this is illustrated in the following scenario:

We will imagine that you have a max bench press of 300 pounds for a single rep. The amount of weight that you will be using for your light volume and light recovery workouts is 33% of 300 pounds. When you do the math, this means that you will be using 100 pounds. We will now imagine that you are adding a pound per week to your light volume bench press workouts which means that by the end of the year you will be using 150 pounds. At the same time, your single rep max improves from 300 pounds to 350 pounds over the course of the year.

We must now consider what percent 150 pounds is in relationship to 350 pounds. You will find that 150 is about 43% of 350. In other words, the amount of weight you are using with light volume and light recovery training will tend to creep up to a higher and higher percentage of your single rep max until your light workouts are no longer light any more. To remain at 33% of 350, you would need to reset your bench press weight back to just over 115 pounds. This is why I suggest that you recalculate your percentages according to your current max at least once per year so that your percentages stay in balance.

If you don’t have fractional weight plates, look back to the information in chapter fifteen and add five pounds at a rate that corresponds with how much strength you think you can gain in one year.

Chapter 17

Progression With Bodybuilding Workouts

The bodybuilding workouts are based on doing as many even paced reps as possible for each work set. If you know how many even paced reps you can perform with a given weight and exercise, you can try adding weight once per week or once every other week. The amount that you add is based upon how fast you can gain strength each week. If you are gaining at a super-fast rate, you will be able to add ten pounds per week while still maintaining an even rep pace throughout the entirety of each set. If you are gaining at a very fast rate, you can add five pounds per week. These types of rapid gains cannot be maintained for very long. When the rapid gains start to slow down, adding a pound per week is still going to give you fifty pounds by the end of the year, and adding a pound every other week is going to give you twenty five pounds by the end of the year. Don't be discouraged by this as it adds up to 100 pounds in four years and 250 pounds in ten years.

The Marker Rep

You can keep adding weight once every week or once every two weeks as long as you can still maintain an even rep pace for the intended number of reps. If you reach a point where you add weight and you can perform the intended number of reps, but the last rep starts to slow down in comparison to the previous reps, you have hit what I refer to as a **maker rep**. The marker rep marks the point where rep speed starts to slow down and you start to struggle more if you choose to keep pushing for more reps before ending the set.

Any time the additions of weight accumulate to the point where it causes the last rep of a set to start slowing down, do not keep adding weight from week to week or every other week. Keep using the same weight and reps until the slower rep speed that occurs on your last rep vanishes so that every rep of the set is performed with the same rep speed including your last rep. Once you can perform the intended number of reps without slowing down on your last rep, you can start adding weight once every week or two beginning with your next muscle building workout.

An important detail in regard to this system of progression is that it is easier to add weight to basic exercises such as squats, deadlifts, presses, and rows or pulldowns. You will find it more difficult to add weight to isolation exercises such curls, triceps extensions and dumbbell lateral raises. You must be patient when adding weight to these exercises as your weights will tend to inch up little by little over time.

Another problem that you may encounter when trying to make progress is that fractional weight plates cannot be added to dumbbells. I recommend that you use adjustable wrist weights around your wrists as a means for adding small amounts of weight when using dumbbells.

Chapter 18

Progression for Speed Workouts and Heavy Singles

When discussing a progression system for the speed and heavy single rep workouts, we must consider that these workouts are basically organized into a three week block. While the workouts are done every week, they are not done for same lifts every week. The explosive speed workouts are done twice every three weeks for each exercise, and the heavy single rep workouts are done once every three weeks for each exercise. This means that when discussing how to add weight, it is easier to address in terms of how much weight to add every three weeks.

I suggest that you use your heavy single rep workouts as a gauge for how much weight to add to your explosive speed and power workouts. Your minimal goal for the heavy single rep workouts would be to add one pound to each lift once every three weeks. This would amount to a strength gain of 17 pounds over the course of a year.

Adding two pounds every three weeks would give you a gain of about 35 pounds in a year.

Adding three pounds every three weeks would equal a little over 50 pounds in a year.

Four pounds every three weeks would equal close to 70 pounds in a year.

Five pounds every three weeks would equal close to 85 pounds in a year.

Six pound every three weeks would give you just over 100 pounds in a year.

When adding weight to your heavy single rep workouts, remember to do so within the context of maintaining a smooth nonstop lifting motion for all your lifts. If you add weight and it causes a break in your form or your lifting motion, do not keep adding weight to future workouts until your form and lifting motion smooth out. When you start adding weight again, make sure to add weight in increments that allow you to maintain excellent form without any visible breaks in your lifting motion. Make adjustments as necessary in order add weight at a rate that is sustainable and repeatable instead of adding weight at a rate that causes frequent sticking points.

Explosive Speed Workouts

When adding weight to your explosive speed workouts, consider how much strength you are gaining from your heavy single rep workouts. If you are able to add a specific amount of weight every three weeks when doing your heavy single rep lifts, you want to raise your weights by an equivalent amount for your explosive speed workouts.

As you continue to work out over time, you may find that the percentages of weight that you are using for your explosive speed workouts start to deviate substantially from the percentages listed in chapter 13. If this happens, use your current single rep training max as a basis for recalculating the amount of weight you should be using according to the correct percentages. Check every six months to a

year to make sure that the percentages you are using for your explosive speed workouts match the percentages listed on the workout templates in chapter 13.

Don't Just Add Weight to Your Heaviest Sets, Add to Every Set

A final point that I feel is very important to consider when adding weight to your explosive speed and heavy workouts is to add weight to all of the sets listed for each workout. **Don't just add weight to the heaviest set of a workout, but make sure to add weight to the lighter sets that lead up to your heaviest sets.** I believe this detail is of vital importance if you want to experience long term success.

Remember that many lifters have a top up mentality which means that their total focus is on trying to increase the heaviest sets without any thought of systematically increasing their lighter sets. All of their improvement rests upon a few heavy sets each week when they could recruit the sum total of all sets throughout the week as means of progression in order to drive their strength upward.

Light volume sets, light recovery sets, and all of the warm up sets that lead up to your heaviest sets should be utilized in a progressive manner. When done correctly, the consistent addition of weight to your lighter sets will form a powerful foundation that will consistently push the weights at the upper levels of the pyramid to higher heights. This concept cannot be overlooked as it is one of the foundational basis for the long term effectiveness of the high frequency strength training pyramid.

Chapter 19

Adjustments To The Schedule

The training schedule for the high frequency pyramid can be adjusted if it leads to a better training effect. The basic schedule listed in chapter one places the majority of the volume at the start of the week on Monday through Wednesday. The volume is then reduced on Thursday through Saturday in order to allow for a super-compensation effect. I have found that it is also quite effective to schedule the volume phase for Wednesday, Thursday, and Friday. Saturday is a light recovery workout; Sunday is off with no training, and the speed and heavy lifting are done on Monday. Tuesday is off. This gives you a day off the day before and the day after your heavy workout. This schedule is shown below and I believe it is an excellent option.

Mondays:

Part 1: Explosive Speed (Layer 3)

Week 1: Squats and Deadlift

Week 2: Bench Press and Deadlifts

Week 3: Bench Press and Squats

Part 2: Heavy Single Reps (level 4)

Week 1: Bench Press

Week 2: Squats

Week 3: Deadlifts

Tuesdays: Rest. No workout

Wednesdays: Light volume training: 8 sets per muscle group (level 1)

Thursdays: Light volume training: 8 sets per muscle group (level 1)

Fridays: Muscle building workout (level 2)

2 to 4 sets per muscle group x 6 to 12 reps per set

Saturdays: Light recovery training: 4 sets per muscle group (level 1)

Sunday: Rest. No workout

Another option for adjusting the schedule is to divide the workout consisting of speed training and heavy single reps into two separate workouts. If you choose this option, this is how I would organize the workouts over the course of a week:

Mondays: Muscle building workout (level 2)

2 to 4 sets per muscle group x 6 to 12 reps per set

Tuesdays: Light volume training: 8 sets per muscle group (level 1)

Wednesdays: Light volume training: 8 sets per muscle group (level 1)

Thursdays: Off

Fridays:

Very Heavy Lifting (level 4)

Week 1: Bench Press

Week 2: Squats

Week 3: Deadlifts

Saturdays:

Explosive Speed (Layer 3)

Week 1: Squats and Deadlift

Week 2: Bench Press and Deadlifts

Week 3: Bench Press and Squats

A final adjustment that will be considered is simply to cut back on training volume every fourth week and just do two workouts consisting a muscle building workout (layer 2) and a combination speed and heavy single reps. The fact that you program your body with high frequency training for three consecutive weeks and cut back the fourth week is going to cause a super-compensation effect the fourth week. You may experiment with other ways to vary the frequency in order to promote phases where you experience an increase in super-compensation.

Chapter 20

High Frequency Training

There are numerous adjustments that you can make to the original schedule in chapter one. Anytime you feel that you need to make an adjustment to the schedule in order to create a better training effect, you can try out the adjustment. The high frequency training pyramid that is explained in this book is just one way to set up a pyramid. You can create your own variation of a pyramid, but the bottom line of any variation is to follow results by holding on to the variations that work and throwing out the variations that don't work.

One of the things that I appreciate most about high frequency training is that it allows for substantial variety within your training. You can include light days, speed days, bodybuilding days, and heavy days all in the same week. The high frequency pyramid is designed to include the lowest intensity workouts the most often. One of the biggest reasons for this is to promote sustainable gains over the long term by minimizing adaptive resistance that comes from training too hard too often. However, there is nothing stopping you from experiment with more aggressive types of high frequency training if you want to. You may find it more beneficial to place more emphasis on the muscle building layer more often, or the speed workouts or the heavy workouts more often. Do what works as long as it works, and if it quits working, change to something else.

If you stop to think about it, the options for high frequency training are almost unlimited, but the reason I favor the high frequency training pyramid is because it gives you rational guidelines for structuring workouts to take advantage of the benefits of several types of training while minimizing the risk of overtraining. Most people think of high frequency training as an extreme that only a few people

can tolerate, or they believe that it requires the use of performance enhancement drugs in order to recover, but many people could benefit from high frequency training if they follow these three guidelines:

1. A lifter must avoid suddenly jumping into high frequency training and take the necessary time to work into it.

2. Training intensities must be varied properly in order to avoid training too hard too often.

3. Slow strenuous grinder reps must be avoided, and each muscle group should only be trained as long as it is at full strength and no longer.

There are lifters who occasionally use high frequency training for one to three weeks and then cut back to medium or low frequency training. Often times the reason that lifters must cut back is because they are training at a very high level of intensity in every workout and the combination of using high intensity on a high frequency basis is too much to handle. The high frequency training pyramid is designed to allow you to use high frequency training on a consistent basis if you should choose to do so. While the high frequency training pyramid is based on guidelines, these guidelines should be thought of as training tools that give you direction instead of training rules that cannot be altered when necessary. The guidelines, concepts, and workouts should be adjusted according to your goals and capacities. It is my hope that the information in *The High Frequency Training Pyramid* will equip you with additional training tools and strategies to help you achieve your strength training goals. Best of training to you.

About The Author

Mark Sherwood is a long time fitness enthusiast who has pursued weight training and other fitness activities for over thirty years. His educational and professional background include a B.S. degree as an exercise specialist in physical education from the University of Wisconsin Madison, and positions as a fitness instructor and physical education teacher.

One of Mark's passions is to distinguish between strength training concepts that are consistently effective as opposed to those that are effective for a short time period. Through his education, research, and personal trial and error, he has endeavored to gain the necessary knowledge to share effective training strategies with those who desire to maximize their training results.

Mark resides with his family in Southern California. For more training resources from Mark, you can visit www.precisionpointtraining.com. In addition, you can you view more books on strength training that he has authored on the next page.

Additional Resources

A Quick Guide To Strength

Beginning Strength Training

Cluster Set Training

High Frequency Strength Training

Heavy Frequency Training

Individualized Workouts For Hardgainers

Overcoming Strength Training Plateaus

Quick Workouts For Quick Muscles

Rest-Pause Training

Strength Training Capacity

Strength Training Thresholds

Strength to the Max

The 1 x 100 Challenge

The Peak Strength Principle

12-10-8-6: A Workout Plan For Building Size And Strength

References

References to Stuart Phillips research on training with light weights:

Source: Men's fitness Article // Author: Michael Rodio // internet address: https://www.mensfitness.com/training/build-muscle/if-you-want-build-muscle-and-gain-strength-lift-lighter-weights-more-reps

References to Brad Schoenfeld's research on training volume:

Source: Youtube video: Brad Schoenfield Muscle Hypertrophy Misconceptions: Time frame: 4 min 0 sec. to 5 min, 20 sec. https://www.youtube.com/watch?v=1iNdAeqet-g&t=18s