

MP45

TRAINING: BUILD MUSCLE. BURN FAT.



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TRAINING PREFACE

Now that we discussed nutrition and how important it is to provide your body with the proper nutrients throughout the day, we are going to get into the training aspect. While nutrition plays the greater role in determining how your overall physique will look, training is necessary to determine how “toned” and “chiseled” you’re going to look as well as the level of physical fitness you will ultimately achieve.



Training is essential to build muscle, burn calories, increase your VO₂ max, enhance your aerobic and anaerobic capacity, and raise your basal metabolic rate. Most people realize that eating healthy is the big battle to achieving a lean look. However, if you don’t train, you’ll look flabby with little to no muscle tone at all, which is also referred to as “skinny fat”, which I’m sure you’re trying to avoid at all costs. Now that you have a great concept of nutrition after you’ve read the nutritional portion of this guide, you’re better prepared to tackle the training principles before we ultimately get to the 45 day detailed guide of what to do for the next 6+ weeks. With that being said, training is necessary for everyone and weightlifting and cardiovascular exercise should be a constant for everyone regardless of their specific goals (i.e.- shredding down or bulking up). As discussed above, nutrition will deliver the differences in those results in terms of what your overall frame looks like (small or big).

Most people are completely misguided when it comes to training. These misinformed individuals are under false impressions such as *“I don’t want to build muscle, I want to tone”* or *“Weight training will make me too bulky”*. Neither of those two statements are accurate. Weightlifting and cardio are essential for everyone- regardless if you’re an elite professional athlete or an elderly woman looking to stay out of the hospital. Such misconceptions that scare individuals

into thinking that weightlifting will stunt your growth, make you look too stocky or bulky, or will damage your bones or organs are completely misguided. Weightlifting is not just for those who want to look like muscular bodybuilders, so be sure not to cave in to the rhetoric. Weightlifting and cardiovascular exercise are essential for living a healthy life, maintaining strong and healthy bones, increasing the efficiency of your internal organs and processes such as the endocrine system, becoming more energetic, increasing your metabolic rate so you can look and feel lean and strong for the rest of your life. Moreover, the mental toughness you will gain from going through training will transfer throughout all facets in life and the experiences you take from the gym will prove to be your backbone support for any tough time throughout life.



If you can go through the discipline of the rigor that training on a daily basis supplies, you'll be able to handle any rough patch that comes your way throughout life. I have often found with my clients, that mental change in terms of mastering their emotions, improving their relationships, increasing their finances, and enhancing their overall passion for life comes much quicker when I've changed them physically first.

The training portion of MP45 will discuss in detail everything you need to understand in regards to exercising and what will provide you with a lean muscular body, and what won't. However, more importantly, it will explain to you *why* it works. In order to succeed in life, it is essential to understand the *why*. Why you are doing something and how it works is essential in achieving the results you desire. Just performing something, without understanding the effectiveness of it and the reasoning behind the purpose is setting you up for failure.

This training guide is intended to teach you the basic principles of training so you understand what to do in the gym and the science behind it, so you know the effectiveness behind what you're doing, and ultimately, why you're doing it.

All training is not equal and the intensity to which you approach your training will ultimately determine the results that your body will demonstrate to the public. The following will enlighten you on how to approach training. You will understand how often you should go to the gym, how long you should stay in the gym, what you're supposed to do when there, what the most effective form of cardio is, and much more.



BASIC TRAINING INFORMATION



Some things to get acquainted with before you get started:

We can break up training into two parts: weightlifting and cardio. While both can be incorporated together in what is called high intensity circuit training, each should be delineated as a separate entity in terms of meeting your weekly quotas for each. While there are many programs out there that dictate that you can get a six pack by just diet and not performing training at all or by just performing one aspect of training (weightlifting or cardio), you will not see a near resemblance of the results you will see by adding both aspects of training to your regimen.

Getting a six pack with chiseled arms, a toned chest, and muscular shoulders is hard work. If it was easy, everyone would look like a supermodel, and by extension, everyone would walk around with a six pack without putting in any effort. Nevertheless, you and I both know that is far from the case. Moreover, why would we ever want that to be the case? Don't we want hard work to reap better rewards than the people who don't work for it? You bought this guide because you're active about improving your lifestyle and making the appropriate

changes to develop a better physique. That's step one and that means you're a harder worker than the indolent individuals who didn't have the guts to educate themselves in the first place. The next step is following through on your good intentions after you've read this guide by working your nose to the grindstone to get in shape.

You must ask yourself what's the most important thing in your life is right now. If you become depressed after looking in the mirror or going out at night when surrounded by the opposite sex because you're embarrassed by your waistline, getting in shape has to be priority number one in your life in terms of a to-do list. Will it replace your other priorities such as family and work? Absolutely not. This lifestyle change doesn't take up much time; it's just behaving in a different form and substituting meaningless tasks with more productive ones. Furthermore, training intensely will only help those other facets of your life by being more disciplined and motivated to be productive during your time and helping others. However, it will require replacing a chunk of your free time that you currently devote to playing video games, watching reality television, or napping in bed with a productive activity like going to the gym. You have time. It's about making time. Foregoing those inconsequential, meaningless tasks with something powerful like enhancing your wellbeing will transform your life in more ways than you can ever imagine. For all the time spent on researching and educating yourself on how to get in shape, now you have to actually put the time you have to use by putting the pedal to the medal in the gym.





Training should realistically only take up between 5 and 10 hours a week, but those hours are essential in order to see the gains that you want. Those 5-10 hours will be critical towards your physique. Nonetheless, it's not about the amount of hours you put in but it's what you put into those hours. It's going to take maximal effort while you are there.

Don't you notice several people that you know who religiously walk miles and miles a day, yet they are far from "in-shape"? I know countless individuals who spend *hours* exercising, yet they actually walk around with slabs of fat. These individuals burn a ton of calories while exercising, yet their bodies do not develop into a finely tuned machine capable of burning calories long after the exercise is over. Now, have you ever looked at a sprinter? The sprinter exercises for a very short period of time. However these are short bursts of extremely intense exercise. We will get into the finer details regarding the difference, but even though the former is burning more overall calories during exercise than the latter group, the type of exercise and the trauma presented to your body through the form of intensity is the determinant factor in what dictates the appearance of your physique and your ability to burn fat and build muscle tissue long after the exercise is over.

So you may try to avoid the philosophy by training longer, by saying to yourself “What if I don’t work as hard, but I put in more than 10 hours? Wouldn’t that have the same result?” That couldn’t be farther from the truth. Not only is there the overtraining aspect that we need to carefully monitor (which will create the improper hormonal balance that will put on fat and increase myostatin levels to decrease muscle mass), but the principle of intensity (which we will discuss shortly) dictates what kind of results you will achieve.

Hard work within the allotted time given always pays off in the end. You will get anything you want in this world if you work hard. Therefore, you have to do both weightlifting and cardio in order to get in the best shape of your life, and especially if you want to see fast results. While this may seem obvious, there are two sets of people who I’m particularly stressing this on. A lot of people shy away from weightlifting because of their desire to cut up. Yet, weightlifting intensely rapidly elevates your basal metabolic rate and the more muscle mass you have, the more calories you will burn to sustain that muscle and the leaner you will be as a result. In the same breath, there are the other set of people who don’t perform cardio because of their fear of it hindering muscular development. Yet, cardiovascular exercise trains your heart to be more efficient at doing the things it is meant to do. Your heart is the most important muscle in your body, and in essence, directly controls the other muscles in your body, which only thrive with an adequate amount of blood supply and oxygen sent to them. A more efficient and effective heart will pump blood more efficiently throughout the body and deliver more nutrients and oxygen to your muscles. Not only that, but cardio will make you look leaner by shredding down more body fat during exercise in addition to post-exercise because of the increase in required oxidation while laying down on the couch through the elevated core temperature and metabolic processes that are produced as a result. Also, if done properly, cardio can actually build lean muscle mass in the process.

Here are a few basic rules when it comes to training that you should become aware of before we get into the more detailed versions of each:

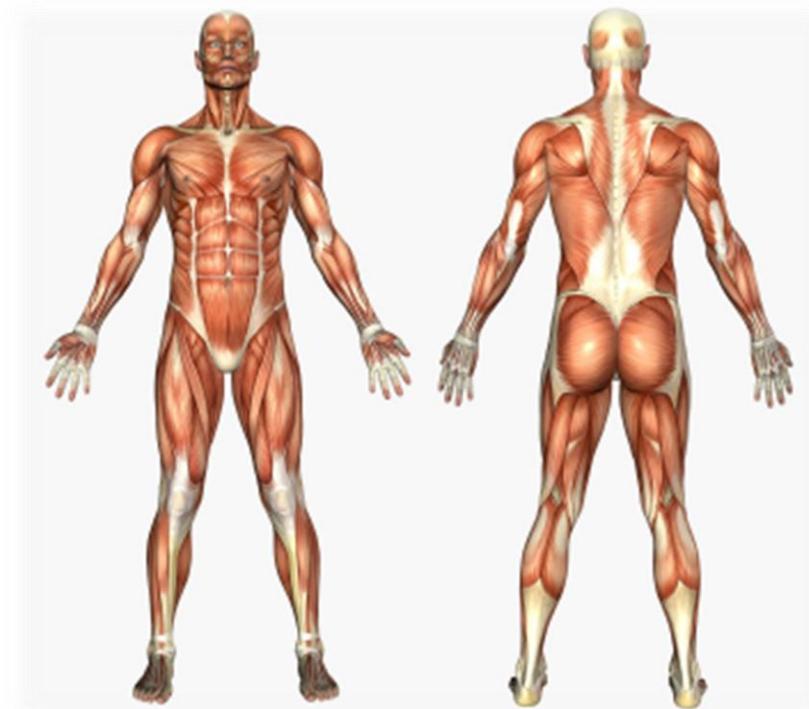
1) Brief Benefits of Weight Training:

- Help raise your metabolism. Muscle burns more calories than fat, so
- the more muscle you have, the more calories you'll burn all day long.
- Strengthen bones
- Enhance your metabolic functions and central nervous system to better handle stress
- Make you stronger and increase muscular endurance
- Help you avoid injuries
- Increase your confidence and self-esteem
- Improve coordination and balance



2) Muscle Groups

- Chest- Pectoralis Major and Pectoralis Minor
- Back- Latissimus Dorsi, Rhomboids, Rector Spinae, Teres Major, Teres Minor, and Infraspinatus
- Shoulders- Trapezius and Deltoid (Anterior, Posterior, and Lateral)
- Biceps- Biceps Brachii (2 heads)
- Triceps- Triceps Brachii (3 heads)
- Quadriceps- Vastus Lateralis, Vastus Medialis, Vastus Intermedius, and Sartorius
- Hamstrings- Biceps Femoris, Semitendinosus, and Semimembranosus
- Calves- Gastrocnemius and Soleus
- Gluteus Maximus
- Forearms- Extensor Carpi Ulnaris, Extensor Carpi Radialis Longus, Extensor Digiti Minimi, and Extensor Digitorum
- Abs- Serratus Anterior, External Oblique, and Rectus Abdominis



3) Overload Principle

To build muscle, you need to present your muscles with more resistance than they are currently used to. This is exactly why you will experience the most rapid results in the beginning of your training regimen when you first start weight training and the results will have diminishing marginal returns. This is important because the more you do, the more your body is capable of doing, so you should increase your workload to avoid plateaus. So in essence, this means that you should be presenting your muscles with the concept of failure. Going to failure means you should be lifting enough weight that you can only complete the desired number of reps and no more. You should be able to finish your last rep with difficulty; nevertheless, form will always take precedent with this.

4) Progression through Variety

In order to present your muscles with a different stimulus, you need to increase your intensity regularly, change the frequency of your workouts, and the type of workouts you do. You can achieve variety by increasing the amount of weight lifted, changing your sets and rep scheme, changing up the exercises used, changing the type of resistance, experimenting with shorter/longer rest periods in between sets, etc.

5) Rest and Recovery

Rest days are really just as important as workout days if you are serious about your body. Your body breaks down muscle during the gym, but then it is the rest and recovery that allows your body to repair its musculoskeletal system outside the gym. Furthermore, when you train hard, the trauma presented to your body is very taxing on your organs and your central nervous system. Therefore, your body needs adequate time off from the gym to repair itself. Moreover, your body maintains and regulates its hormone production during sleep. You need to be getting approximately 8 hours of sleep a night to produce enough human growth hormone and make sure your body's cortisol levels stay at a minimum.

6) Stick with the Basics:

- If you leave any muscle group out, this could cause an imbalance in your muscles and possibly lead to injury. You need to hit every muscle group once a week.
- A thorough warm up and cool down is necessary. If you are going to work a particular region of the body, make sure to warm that area thoroughly.
- Start with your larger muscle groups and then proceed to the smaller muscle groups. The most demanding exercises are those performed by your large muscle groups and you will need your smaller muscles to get the most out of these exercises.
- Always remember to breathe during exercise and use a full range of motion throughout the entire movement. Do not use momentum to lift the weight. If you have to swing to get the weight up, you are using too much weight. An appropriate weight is one that you can handle smoothly with a slow and controlled movement the entire way down.
- Follow the 80/20 Principle. 80% of the results you see will come from 20% of the exercises used. Compound movements with heavy loads that require the work of dozens of muscles at once will have the biggest effect on your body. This includes the squat, deadlift, bench press, clean and jerk, military press, barbell shrugs, and dumbbell lunges, among others.
- Free weights and compound movements will activate more muscles than machines and isolation exercises do. They also require more energy, so you will burn a lot more calories, so free weight compound movements should consist of the staple of your exercise program. However, you also need to make sure that you do isolation exercises but these should be more for warming up the muscle and to flush blood into that particular area to help it grow.
- Always choose a standing version over a seated version of an exercise to not only gain more out of it, but to also burn more calories.
- Pay attention to your posture and engage your core in every movement you're doing to keep your balance and protect your spine.
- Exercise is protective, but like anything else, overdoing it is not good for you. Start with light weights, use limited arcs that don't cause any pain, and increase the exercise level slowly. An injury will only be

devastating for your fat loss goals, so be extremely careful in the gym. A lot of injuries in the gym are due to carelessness and going too heavy to handle.

- Each repetition needs to be done with a slow and controlled movement and needs to be done with your mind concentrating on stimulating the muscle, not just trying to get the weight up.

7) Top 5 Training Mistakes

- Leave your ego at the door. You are not at the gym to show off the amount of weight you can do. You are there to work out the muscle group you have targeted.
- The number one goal in the gym is to get a great workout, not to socialize. Socializing with gym partners or members of the opposite sex takes up chunks of your time and you will take way too long in between sets to elevate your growth hormone levels and natural testosterone.
- More is not always better. You need to stress quality over quantity. While the intentions of going to the gym for longer periods of time and more frequently are good, it sometimes is done in vain. You should never work out for more than an hour and you need adequate rest in between workouts.
 - Not using proper form will destroy your efforts. Not only does it waste your time because it does not work out the muscle group you are looking to build, it often leads to injury. Never use momentum to hoist a weight up and always perform a slow and controlled movement on both the eccentric and concentric phases of the repetition. The weight should be handled on the way down just as slow, or slower, as it took you to bring it up.
 - Failing to train your lower body on a weekly basis will leave you imbalanced and halt your progress.



Chest:

- Barbell Bench Press
- Incline Dumbbell Press
- Decline Barbell Press
- Cable Crossover
- Pec Deck Butterfly Machine
- Push-Up
- Floor Press!
- Chest Press!
- Dumbbell Fly

**Back:**

- Bent over Barbell Row
- T-Bar Row
- One-Arm Dumbbell Row
- Renegade Row
- Seated Cable Pull
- Seated Rowing Machine
- Lat Pull Down
- Pull-ups
- Close Grip Pulldown
- T-Bar Row



Abs:

Cable Woodchoppers
Floor Wipers
Twisted Cable Baseball
Swings
Crunch
Hanging Leg Raise
Ab Rollout
Jackknifes
Lying Combo Crunch
Reverse Crunch
Lying Combo Crunch
Rocky Hip Thrust
Decline Twisting Crunch
Side Oblique Crunch
Plank
Machine Crunch
Oblique Machine
Weighted Rope Crunch



Biceps:

Standing Dumbbell Curl
Hammer Curl
Seated Concentration Curl
Barbell Curl
Preacher Curl
Modified Straight Bar Curl
Lying Cable Curl
Chin-Up
Standing 1 Arm Cable Curl
Rope Curl
Arnold Curl



Triceps:

Close Grip Bench Barbell Press
Dumbbell Kickbacks
V-Bar Pushdown
Skull Crushers
Bar Dips
Reverse Cable Curl
Overhead Rope Extension
Weighted Dip on Bench
Overhead Dumbbell Press
Close Grip Hammer Dumbbell Press
French Press Machine



Shoulders & Traps:

Seated Dumbbell Military Press
Barbell Snatch and Press
Dumbbell Lateral Raise
Dumbbell Front Raise
Leaning Side Dumbbell Raise
Standing Barbell Press
Arnold Press
Seated Dumbbell Shrug
Bent Over Dumbbell Lateral Raise
Rear Deltoid Reverse Pec Machine
One Arm Bent Over Rear Deltoid Lateral
Barbell Upright Row
Bent Over Rear Dumbbell Lateral Raises
Overhead Press (Dumbbells)
Cable Lateral Raise
Cable Front Raise
Standing Barbell Shrug



Legs (Glutes, Quads, Hamstrings, Calves):

Barbell Back Squat
Single Leg Pistol Squat
Front Squat
Standing Leg Curl
Hack Squat
Standing Calf Raises
Dumbbell Squat
Barbell Lunge
Stiff-Legged Deadlift
Dumbbell Step Up
Leg Press Machine
Quad Extension Machine
Hamstring Curl Machine
Seated Calf Raise
Donkey Calf Raises
Dumbbell Lunge
Dumbbell Squat
Weighted Dumbbell Jump Squats



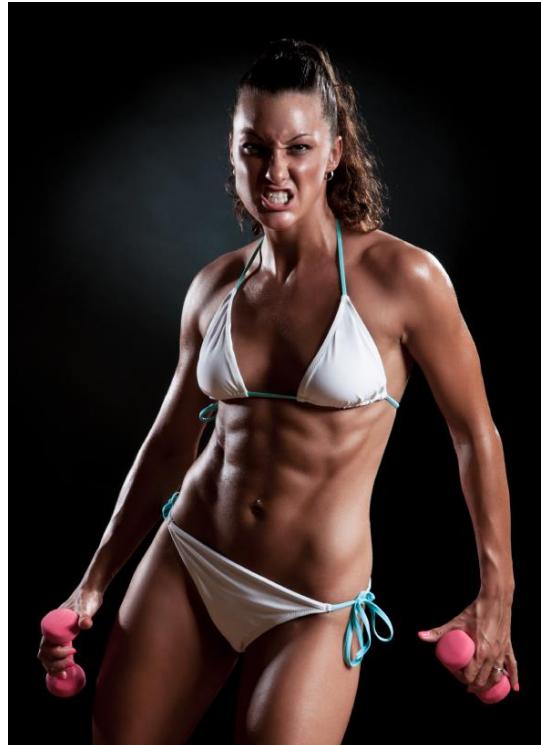
Forearms:

Hand-Gripper Machine
Wrists Up Forearm Barbell Curl
Palms Down Forearm Barbell Curl
Dumbbell Wrist Flippers



MAJOR TRAINING PRINCIPLES

So now that we've discussed some basic principles, now we're going to get into everything in detail and teach you everything in regards to training. Make sure to follow these tips every time you even think about exercising throughout these next 45 days, and well beyond that into your future too. Even while you are at work, you should be thinking about when your next training session will be and what you will be doing within it. If you currently don't have a six pack but you are trying to get one, it needs to be your complete business to do so. Your mindset needs to be totally focused on getting in the proper amount of training sessions per week, ensuring that you are working out each individual body part to the limit, resting it adequately, and shredding the body fat as fast as you can. According to studies, if you do something for 21 days, it becomes a habit. Make it a habitual routine for you to constantly think about how your body is going to change for the better. Follow these sure-fast training tips to make sure your body becomes a muscle-packed machine that burns fat at lightning speeds.



STAY COMMITTED TO YOUR GOALS

The majority of people don't see results they want mainly due to the fact that they get frustrated way too easily in this world. These individuals get discouraged soon after they begin a new endeavor and ultimately quit. For instance, have you ever tried karate? If you're like 99% of the people I grew up around, you tried it and you quit just after a few sessions mainly because the benefits just didn't come fast enough for you to appreciate the time put in. If you believe in that kind of philosophy, you will never achieve anything worthwhile in this world. Anything worth wanting in this world does not come easy. If you want to be successful and skilled in anything, then you must get past this juvenile thinking of immediate gratification. Results do not happen overnight. Success can only be realized through a dedicated commitment to never relinquish no matter how hard it may seem or how rough the road ahead may lie. Success is only achieved through hours and hours of practice, and upon delaying gratification.



Envision your end goal as an infinitely tall building. Getting to the top is hard work but with each floor your viewing capability and, by extension, your appreciation of the world increases. In order to get to the top of the skyscraper, you must go through each floor to go one level higher. There is no shortcut, but once you reach the top, there is nothing but pure elation and joy. You must be

committed to seeing your goal visually, but more importantly set your expectations in a proper direction. You must be prepared to see only small changes in your appearance.

You don't set out to build a castle in one day. You can't build your physique overnight. Instead, you must lay one brick at a time as good as you can, and eventually you will have built that castle.



For instance, professional athletes have tremendous innate ability; we all know that. However, if they stopped there, they would still be amateurs; because those that work hard transcend those that rely solely on their talent. You need to be persistent and determined to get the task done.

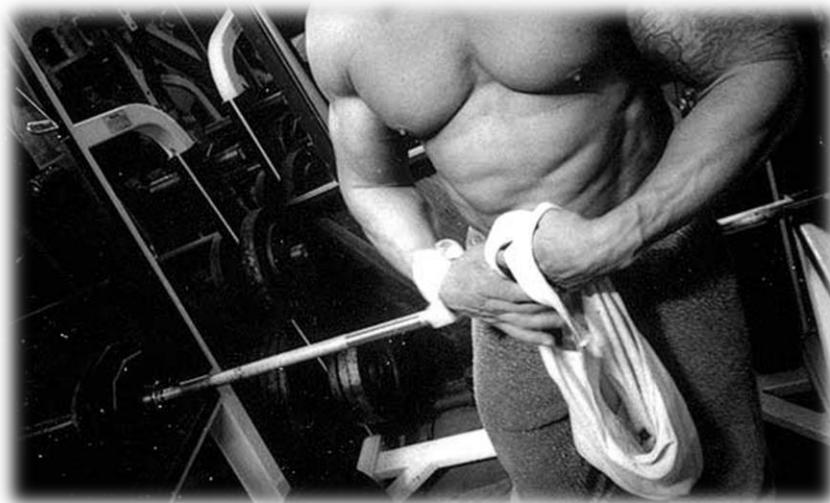
This guide is here to teach you lifelong principles and although we have enclosed a fast guide to get you ripped in 45 days, if you are serious about making fitness a part of your life, you need to hold these foundations close to you and transcend your bad habits by replacing them with a healthy lifestyle change. For instance, if you want to be a great pianist, it will not take one day, a week, or even a year. Will you learn a few songs in the course of a month? Yes, probably, but if you want to be great, it's going to take a very long time of putting your heart and soul

into it. Fitness models don't look the way they do by sheer luck. It's their livelihood.

You need to put in hours and hours a day in order to learn the piano and from there on out you need to constantly readjust. This requires working on your weaknesses and enhance your strengths, and hopefully you'll take the same approach with your body. Each day is one step, and after each committed hour, you are one step closer to the final goal; but, one day missed takes one day longer to get better.

This same attitude needs to be applied to physique building. If you want to develop strength and a lean muscular body, it takes hours in the gym. Not just one day here and one day there, but hours on a consistent basis. You need to pursue your goal by getting into the gym day in and day out. Just like you make it a habit to brush your teeth or watch television before bed, stay committed to getting to the gym. Working out does not take up as much time as you think and the key is to really make time for what's important in your life. Not only will training change your physiological appearance, but also it will provide you the mental tools capable of succeeding in anything you do having to relate to finances, business, and education.

Keep your eyes on the prize and limit distractions. Define what you want to look like and you're going to hyperfocus your attention there for the next 45 days. Don't fold the cards when the going gets tough after a few sessions, but keep pushing forward with the eye on the target.



PLANNING AHEAD

If you fail to plan, you're setting up to fail. You need to create a schedule every single day so you can be more productive. Moreover, planning and solidifying your daily objectives in writing makes you much more likely to stick to the list. Furthermore, it allows you to look back at your day and be proud of all of your accomplishments.

Each night before I go to sleep, I gaze at the ceiling and look back on the events of my day. When I perform a lot throughout the day, I have a sense of accomplishment and it is a truly wonderful feeling that is infectious in itself. The more tasks I complete throughout the day the more proud I become. Also, I notice that the more demanding and daunting the task I finish, the more accomplished I feel. And there are those other days when I truly regret my lack of effort. When I don't perform a lot, I look at my life as meaningless and unworthy, in which I just wish I could go back in time and change things for the better.



I've noticed throughout my life that people need motivation to engage in conduct. Whether it is internal, external, or subconscious...motivation needs to be there in order for an individual to act. People need to be pulled towards a vision. However, we look for push. That doesn't quite last. We burn out that way. A way to get pulled is to have a vision of who you want to be, why you want to be, and then creating a plan of action for the day to be one step closer to that vision. Sometimes it's hard to have motivation to do things, but a written schedule propels us to accomplish. Written words on paper solidify our efforts. If we don't accomplish what's on the schedule, we feel unaccomplished. This plan of action stimulates us to work hard and complete the schedule, especially if there is a sense of urgency there. I challenge you to write down a goal and a deadline for achieving that goal.

You have to start creating a schedule. Odds are you don't utilize every minute to its fullest potential in your current state. Once you put up a schedule for each and every day, you'll notice how much more you will be much more efficient during your day. You probably won't accomplish something throughout every minute even with a schedule, but I assure you'll get a lot more done.

When you create a schedule, though, it should not be vague and depict broad activities. It should not state: 8:00 AM- 6:00 PM- Work

Rather outline the nitty-gritty details within your work like emailing prospective clients and your weekly meeting with your interns. You'll get that much more done at work. In your schedule, you should include minor details like opening the mail, taking out the trash, cleaning the dishes, walking the dogs. A regimented plan that includes inconsequential particulars will prove to be so successful for you and you'll make the most out of your life.

So I beg of you. Take 5 minutes out of the end of your day, every day, to create a detailed schedule for the following day, depicting what you should do for every 15-30 minutes throughout the day. You'll achieve so much more than you are used to and this needs to be applied to your training regimen. If you are working out, write down a log of every exercise you are to do and the exact amount of sets of each so you won't quit so easily next time. Get ready for the war known as life! Your mind is the battlefield! Create a plan of action!



GET A GYM MEMBERSHIP

If you don't already belong to a gym, get started on it. For \$30-\$100 per month, depending on your location and the prestige of the gym, this will be the best investment of your life. Your body is your temple; you only have one place to live, so treat it that way. If you are complaining about the money, just understand that one doctor visit to do an EKG because of heart pain will counteract any savings you made from foregoing your gym membership. This is an investment and there is no better investment than investing in yourself.



As an accountant, student, lawyer, or doctor, do you rely on just pen and paper? You also have a computer, internet, printer, etc. which allows you a greater arsenal of tools to accomplish more and in a more timely fashion. It's the exact same thing with the gym. You can work out at home with a limited toolbox (your body only) or you can have all the tools right in front of you to get the results quicker.

Paying for a gym not only forces you to go on a regular basis, but you will be much more productive working out in an environment that demands people to do nothing but lift weights and run on the treadmill. The friendly atmosphere consisting of dozens of other people going through the same grind in an effort to get in shape will instantly motivate you. Not to mention, you will have dozens of machines at your disposal for each body part and you'll be much more effective and efficient in training your individual muscle groups to build muscle and shred the body fat. This will be the best investment you make because what's the purpose of buying a nice button down shirt or a belt if you don't have the body to show them off in?

GET DOWN TO BUSINESS



Besides actually getting to the gym and showing up to do the task, which is obviously half the battle, there are many other important factors you must take into consideration to make sure your routine is a successful one. You may go to the gym on a consistent basis, but if you aren't in the right state of mind, then you could be wasting your time. When you are in the gym, it needs to be a total mindset of full intensity. Intensity is what provides you with results, not just being there. Going through the motions is not going to provide you with the results you want. Instead, you need to encompass an incessant vigor to plow through set after set, exercise after exercise until you've reached your very last rep. It's got to be tough enough that you're gasping for air during your short rest that you don't even have time or the additional effort to do anything but lift and recover. You need to start getting the most out of your gym time now. This is not the place to socialize. Yapping your jaw off to friends is for a Friday night. In the gym, you've got to get down to business.

Here are three basic, yet very important tips to help motivate you in the gym, helping you to grow as a stronger individual both physically and mentally. This is essentially the motivation you need to lift those final reps, the reps that make or break muscle growth.

The first thing that you should do is find a lifting partner that is of similar size, strength, mental toughness, and ability.

Consequently, you are both going to feed off of each other's energy in a positive way. As someone who has worked out for over 9 years, I have found that most of my

workouts that I have had over the years without a lifting partner were of a depleted nature. This is because I don't have someone to motivate me by telling me to "push it out for five more", when I can barely do one more, to be a spotter to prevent injury, and to help with intensity sets such as drop sets and negative reps. Sometimes there are special cases when a lifting partner could backfire in which he is talking to you non-stop in the gym or needing minutes upon minutes to rest between sets (in which case you need to find a different partner or put him in line), but more often than not, you will experience much better workouts with a motivated partner. Not only is he/she going to push you in the gym, but he/she is going to force you to go to the gym when you are too "tired". I have found many times that my lifting partner has convinced me to go to the gym when otherwise I wouldn't want to because you find that extra something inside to get there when you have your friend "sucking it up" or encouraging you to get your butt to the gym. You don't want to let your lifting partner down, but more importantly, you don't want to let yourself down; you don't want your partner to gain the edge on you by getting an extra day in when you missed a session. When you finish your tough workout for that day, then you will be proud of yourself for going. Moreover, when you have a partner, a competitive nature between the two of you begins to commence, which is ultimately going to be tremendously beneficial for both you and your partner. You will find yourself lifting weights you've never even imagined before, because you will be pushing for one more extra rep than your partner on each set. He is going to do the same as well and you are each going to feed off of this, where you will be hoisting up more and more weight each week just to beat each other out. Additionally, outside of the gym you are going to be more conscious with what you consume,



because you want the edge. Proper nutrition is key and is going to provide you with your physique no matter how much training you do. Bottom line is that you are going to want a competitive advantage over your lifting partner and you are going to behave in a manner that is going to make you stronger, leaner, and more fit. But if there is one thing you take away from this, be wise in choosing the right lifting partner. Choose the right one, who is going to push you both inside and outside of the gym, and it could really make a difference.

Another important part of a successful routine is to track your progress in a log.

I have seen the most gains from simply logging down my progress. For example, if I write down that I did a set of bench press of 225 lbs. for 15 reps this week, then I might go for 16 or 17 reps the following week. Once you log

down the weight, it sticks in your mind what you did and you're going to inherently want to improve upon your past performances. Your main goal should always be to strive for heavier weight or more reps every subsequent week, so when you write your previous progress down, it makes it that much easier to see what you need to accomplish in further weeks. If you don't have a logbook for your progress, then how can you really know if you are making true strides? Each week you may just be "feeling out" the weight rather than really knowing if you are increasing the weight or number of reps. Track your progress and you will surely see strength and muscle gains.

Besides a lifting partner and a log book, you should listen to music in the gym. Music is a great way to motivate you when you need to push through an intense workout. Blasting pump-up songs such as Eminem or Metallica (or whatever gets your blood going) can really pump you up prior to and during your sets even more so than you think. During your set, you may tend to focus your mind on the music, keeping you calm during a tough set and forgetting about the monotony of lifting or the concentration of heavy weight that will eventually bog you down. According to research, listening to music increases your power in the gym, so you are going to lift heavier with it than without it. Additionally, research also supports the fact that your endurance lasts incredibly longer while listening to music than when not. That translates to more reps with the same weight. If you could lift more powerfully and for longer periods of time, you are going to lift more total poundage, which is in turn, going to increase your size and muscle mass/strength.



Moreover, you need to start setting goals within the gym. For instance, set out a number of total sets within a certain amount of time that you are going to complete for back today (i.e.-30 sets in 60 minutes). What this will do is make you more efficient in the gym. You are going to take less rest time in between sets and plow through each set (Just remember not to sacrifice your form to get the set done quicker. Form is essential and should never be neglected for anything, unless you want serious injuries and limited growth). Set goals like number of exercises, sets per exercise, etc. The key is to keep things intense.

Intensity is key but while training, remember that form is essential when lifting weights so make sure you do slow and controlled movements on the way up and on the way down. Make sure you perform a complete full range of motion. You must select an appropriate weight that you can handle without sacrificing form or using

momentum in the process to get the weight up. You want to effectively work the muscle that you are training and you don't want to incorporate other muscles when trying to work on the muscle that you are supposed to, or more importantly, risk injury by doing so. An injury will only put an end to your plan, not further its purpose. However, keep in mind that you do want to work very hard while lifting weights, meaning that the weight needs to be an appropriate weight where you are struggling and coming to failure at the desired rep range.

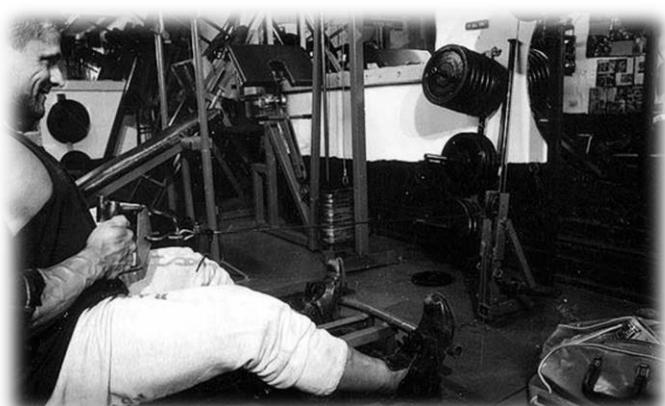
Do not pick a weight that is too heavy where you can't complete a full range of motion. Instead, pick a weight that is rather the heaviest weight that you can actually *handle* while using strict form.



FORM OVER WEIGHT

If your technique or form is incorrect, not only is your training going to significantly delay or completely halt your progress, you are also inviting injury. Don't laugh or shrug it off, because I've seen it over and over when a person needs to go for ACL surgery, rotator cuff repair, or fix a herniated disc in the back because of their failure to exercise care. When you exercise you must think and focus, instead of mindlessly repeating the motions or concentrated on just getting the weight up. You are there to work out the specific muscle you are targeting and that requires training it with deliberation and care. At the beginning and end of every repetition, you should be pausing and squeezing the muscles you are exercising. The mind and muscle must connect! Never use momentum of the swing to lift the weights and do not let gravity drop the weight. You should be controlling it on the way down and spend just as much time on the eccentric phase of the movement as the concentric, that is why you must lift and lower the weight slowly, feeling the tension in your muscles and resisting the load the entire time.

In order for muscles to receive the impetus to grow, you have to stress them to the maximum by creating a proper stimulus. This only happens when you overload the muscle, but in order to do this, you need to go heavy enough and do enough repetitions until you feel you cannot go any further using good form.





On the other hand, if you go too heavy, and you use poor form, you incorporate other muscles that are not intended to be worked by the exercise you are doing. As a result, you fail to properly stimulate the muscle you are working on enough for the muscle to respond by repairing the muscle fibers to come back stronger. Progressive overload is what forces your muscles to grow, which can be achieved by increasing the weight or number of reps completed each successive week.



MISCONCEPTION OF HEAVY LIFTING

You may be thinking to yourself that if your muscle responds to overload then you must go extremely heavy to force your muscle to grow. Consequently, most people take this to the extreme and go too heavy, decreasing the workload spent by the muscle and risking injury. There is a huge misconception that you need to lift heavy to build muscle mass. It's more about form by reaching a peak contraction and stimulating your muscles for an extended period of time. Most people tend to use too heavy of a weight and they look to get the "weight up" at all costs, jerking the weight while using body English and a ton of momentum, whilst neglecting the muscles that they actually are trying to work.

We still have those naysayers and those who hear from "professionals" that "you have to train heavy to gain muscle mass". Heavy is all relative. People misinterpret the formula when they see bodybuilders and powerlifters on YouTube videos who are tremendous guys, handling exorbitant amounts of weights. You see guys bench pressing 600 lbs. and squatting 700 lbs. and you think to yourself that is the only way to get "huge". False. These guys did not start out lifting those weights. It was a gradual approach in which they worked their way up to that weight by progressively increasing their load with weights they could handle.



The great bodybuilder and 8X Mr. Olympia champion, Ronnie Coleman, may be able to perform a 2400 lb. leg press for 10 reps and you call that heavy. However, for him, he uses weights he can handle. You have to realize it isn't heavy for King Ronnie. Obviously, it is heavy for you and I, but he is using a weight he can handle. You don't need to train "heavy" to build muscle. Get out of the routine of going by numbers that others use and looking at the numbers on its face. Let your body crunch the numbers based upon how you feel and how you respond to the routines you are doing. If you experience growth with an exercise, write it down and continue its use. If you don't experience growth with it, write it down and don't continue its use. Sometimes you'll experience tremendous strides with one particular exercise but then it will fade. Take note of it and move on to something else. Sometimes supersets do wonders with certain body parts and don't with others. Find out by intently listening to your body and everything it tells you. You need to find out what is right for you. Strength is relative, and strength is actually developed by strict form and gradually you will see the improvements you are looking for.



So instead of the pounds you are lifting, concentrate on how hard you are working to stimulate your muscles. Your muscles are blind to the number of pounds you lifted; they just experience a certain form of stimulation and toxic buildup, and the growth comes by repairing them with the proper nutrition and by creating the proper anabolic hormonal environment within your body. Most people get caught up with the numbers and let their ego get the best of them. Instead, you need to work your muscle and not worry about the weight you are doing. Strength is relative. Just like anything else, strength corresponds with and is contingent upon your goals. People get caught up with numbers and dwell on what poundage's their peers are lifting or what they "should be doing". You cannot concentrate on the numbers or what other people are lifting, but instead you just need to focus on stimulating the muscle.



Clearly, there is an underlying genetic framework that is going to ultimately depict your body structure. Your muscular layout is very unique and how it responds to certain exercises, volume of resistance, nutrition, and cardio is going to be unique. With that being said, it is impossible to measure strength by the numbers. Every person's molecular and muscular composition is different from one another and their targets are distinctive.

So when you and your buddy are comparing strength, compare not by the numbers, but by how hard you work. You may be better at squats, while he is better at shoulder press and you wonder why? Everything about you is different

from your friend. Your entire molecular structure is special. Your muscular layout is different. Your muscle tendons could be thicker, thinner, longer, or shorter. Even the way your muscle tendons connect to the joint is unique. Your muscle fiber distribution is distinctive. Your muscle tie-ins are different. Your muscle belies are characteristic of your unique body structure.



GO JUST HEAVY ENOUGH

With all of my talk about strict form, that does not mean that you should use extremely light weights to the tune of doing dozens of reps without getting tired. That is not the purpose of what I am stressing by strict form. Strict form means doing the rep as it is intended throughout the entire movement without using momentum, but using a heavy enough weight to reach failure between the 6 and 15 rep range, preferably between the 8 and 12 rep range (failure meaning not being able to do one more rep). Weights heavy enough that you make you fail between the 6 and 15 rep range will activate more muscles within your body and will burn significantly more calories than lifting light weights will that you don't fail at. When you lift substantial enough weights, your body's metabolism skyrockets far after the workout is over, and your body's elevated metabolic rate will force your body to continue to burn calories and fat far after the exercise is over



How many times have you heard someone tell you that he wants to get toned so he is going to lift lighter weights? You should smack some sense into him. Lifting light weights that don't require exuberant effort will NOT get you nearly as "toned" or defined as lifting weights that make you fail. You hear people say all the time, "I just want to tone up. I'll lift light!". You might as well curl a can of tuna fish..

There is no such thing as a toned or un-toned muscle. Muscle is muscle. It can be big or small, but not "toned". People who lack definition have a layer of fat covering their muscular structure and/or not enough muscle in general. The fastest way to get that shredded look is to have as much muscle as possible while being as lean as possible. Sometimes lifting heavy will cause inflammation when repairing to give the appearance of bulkiness, but this will go down after some quality rest. This is why you actually look leaner after you stop lifting for a short

time. Therefore, to achieve that "toned" look you so desperately aspire, you need to build muscle and lose fat. If all your routine consists of is lifting light weights for numerous reps, you really aren't doing yourself justice.



While some exercise is better than none, not all exercises are equal in terms of developing the results you want. You really need to shock and stress the muscle enough for it to grow. Proper stimulation of the muscles through damage of the muscle fibers is required for it to grow once nutrients are flowed into that point of damage. Heavy lifting activates more muscle fibers because of the increased strain added throughout the muscular skeletal structure and central nervous system. The more muscle fibers that are activated, the more muscle fibers will be damaged in the process, whereupon reparation of those fibers through proper nutrition will result in increased growth. Even if you are a woman and you say to yourself "I don't want any muscle mass and I certainly don't want to look bulky", women don't produce enough of the hormone testosterone to build much muscle mass with the absence of estrogen blockers and/or performance enhancing drugs.

Furthermore, any muscle you do put on burns fat four times more efficiently than the fat you have on your body. So, male or female, you inherently want to be all muscle because your body will be like that aforementioned furnace in the sense that it will be extremely efficient at burning up fat stores. The more muscle you have, the more fat you will burn. So, even if you don't want big muscles, your number one target should be to build muscle, even if your goal is just to burn fat and look "toned".

If you want to be shredded, you've got to do everything in your power to speed up your metabolism both inside and outside of the gym. While activities like long distance steady running and light weightlifting burn calories while doing the activity, the calories stopped getting burned upon completion of the activity. Nonetheless, heavy lifting and interval cardio, whereupon the intensity levels change for an extended period of time, result in an increased metabolism long after the workout is over. That means you will be burning calories even when you are not exercising. So, in essence, you can burn fat while watching TV on the couch so long as your activity is one that inherently requires a wide variance and differentiation in intensities. In other words, your working period has to be explosive and gut-wrenching compared to your rest period.



Lifting weights that are heavy enough to bring the muscle to failure, especially within the 6-8 rep range, stimulate two powerful hormones, known as testosterone and natural human growth hormone.

These hormones are attributed to building muscle and losing fat. Therefore, these hormones make losing fat and building muscle much quicker and easier even outside of the gym.

Performing light weights for very high reps doesn't nearly ramp up these levels of hormones quite like heavy lifting does.

Don't misinterpret this, however, to mean you should never perform high repetitions with lighter weight. Weights for high reps have its benefits. This is not a suggestion to eliminate it altogether; however, it clearly should not be the basis of your workout. Rather high rep schemes are great to use for variation to send your muscles into shock and to use as a supplement. Light

weights are important to be used when warming up, cooling down, doing burn-out sets, drop sets, etc. We will get into the importance of adding some high rep sets in more detail later, but for the most part, light weightlifting for a high amount of reps helps build your slow twitch muscle fibers' resistance and muscular endurance, and is a great way to stimulate blood flow throughout the body, which is necessarily needed for healthy circulation and transporting nutrients to muscles, joints, and ligaments. In addition, doing high-rep training (like drop-sets or doing a random set of 50 reps) can break away from a repetitive workout routine and thus, can shock the muscles into new growth when your body's response has acclimated itself to a repetitive workout consisting of just 8-15 reps.





However, the basis of your workout should always be working with heavy weights. Light weight workouts are great to supplement heavy lifting (key word supplement: meaning to incorporate into a routine here and there), however, you should consistently lift to your maximum potential each and every time you step foot in the gym. So in terms of lifting heavy, you should focus on performing 6-15 reps for 80% of your routine, whereupon the other 20% you can go over or under that number. Don't misinterpret this to mean there should be very little variety between workouts. Most definitely, it is on the contrary.

Furthermore, you should always keep your intensity high, so the pace at which you are lifting should be at a very high level in which you rest minimally in between sets. Even when you are lifting heavy, in order to keep your metabolism high, you should rest for no more than a minute between sets, preferably, even less than that. Obviously there are exceptions due to different fitness levels and goals, but generally speaking, on average, you should keep to that. You want to keep your heart rate up and you are also building muscle because your muscles are constantly stimulated every minute.

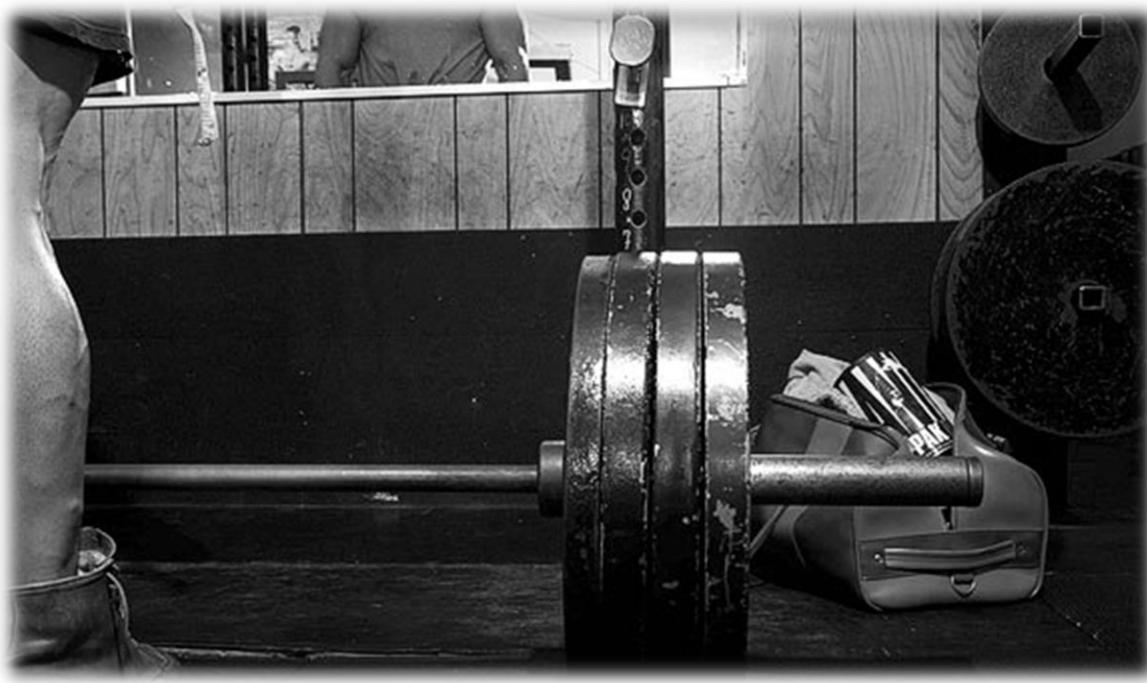
Nevertheless, here is the biggest part in which you must pay attention. The biggest problem that people fail to realize is what is considered heavy. Heavy is still a weight that you can handle, whereupon your ligaments and joints aren't suffering. This is repeated several times throughout this book and program, because no matter how many times people are told to keep it light, they usually go too heavy and present their bodies with tremendous risk in terms of injury. Heavy lifting does not incorporate momentum into the movements! You are doing strict form at all times; however, you are doing a weight where you reach failure upon a designated number of reps and whereupon you struggle to get that weight up. When the word struggle is used, it is not to mean that you should jerk the weight or break your posture to get it up. Form should always be strict and heavy lifting is a term that means you shouldn't choose a weight that you can do for 20 reps and perform it for only 10 reps. It means picking a weight you can do for exactly 10 and not 11, and getting it up for 10 reps. Furthermore, always perform a full range of motion. People often look at going heavy as putting as much weight as possible on the squat rack, getting under it, going down less than halfway, and considering it beneficial. WRONG! This will do nothing for your muscle building efforts and will only aid in getting you to the hospital. Partial reps do serve their purpose in some instances, but that should be reserved when you are incredibly experienced in training and when you do it to bring up some of the lagging muscles of your body up to speed. We will discuss that in some more detail later.



Let's take a look at some examples as to what constitutes proper weight training using strict form:

- When doing squats, keep your back straight with all of your weight on the back of your heels and go all the way down until the top of your thighs are parallel to the ground. Pause for a second as if you were sitting on an imaginary chair, and explode up in one smooth motion while looking straight forward and keeping your spine in neutral alignment.
- When doing bench press, bring the weight all the way down slowly until it reaches just before your chest wall, pause for a second at the bottom and explode up in an arch-like motion backward with control. You are never bouncing the weight off your chest, but always keeping your back arched with your lower back and traps on the bench at all times. Remember to never perform the movement too fast and lower the weight as slow or slower than it takes you to lift the weight up.
- When doing a bent over row, arch your back (never round it), while keeping a slight bend in your knees and keeping your elbows as close to your body as possible.
- When performing a barbell curl, never swing your back to get the weight up. Always keep your elbows in and bring it up in a smooth motion. So understand that you need to activate as many muscle fibers as possible by lifting heavy weights, but never to the point where those weights take you out of form or place you in harm's way.

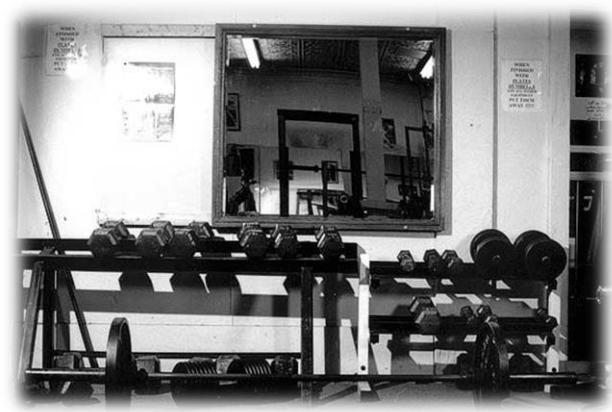
FREE WEIGHTS VS. MACHINES



Anytime we are in the gym our goal is to activate as many muscle fibers as possible on the particular muscle groups we are training. So when there is an option between choosing an exercise with a machine or free weights, **ALWAYS** choose the free weights. Most machines do not involve as much of the synergistic muscles (supporting muscles) as free weights do, and therefore do not build as much muscle mass. Synergistic muscles are the smaller muscles that aid the main muscles in balance and strength in each lift. While machines can serve a great purpose, especially for beginners, always use free weights if you are interested in transforming your physique and taking it to the next level. Activation of your stabilizer muscles will take effect, including your core, and there will be a significant increase in the amount of calories expended throughout the exercise.

When talking about free weights we mainly mean using dumbbells or barbells as opposed to a machine. Some common exercises that consist of this would be the bench press, squat, deadlift, dumbbell military shoulder press, etc.

These exercises require the use of a free range of motion that you have to support on both the way up and the way down, meaning you are controlling the weight throughout the entire movement. On a machine, the range of motion is that of a guided one, supported by the machine itself on the way up and way down, taking a majority of the workload off of your muscles. Lifting weights should not be a singular plane working in a two dimensional space, which machines constrict you to.



Free weights make you bring the weight through several planes and across a three dimensional space which requires a greater amount of energy, or calories expended, and activates many more muscle fibers.

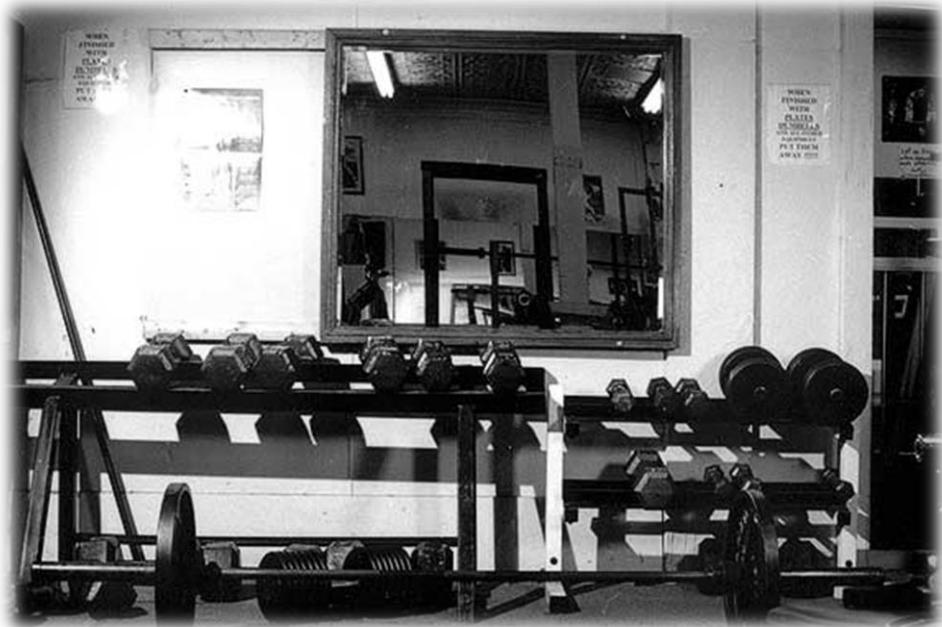
Furthermore, lots of machines that are very popular within gyms such as the Smith machine are some of the worst possible exercise tools for your body's health if done improperly. For instance, when you perform squats on the Smith machine, it does not take into account the natural curvature and shape of your body and forces you to take on a path of motion that may not be natural for you. People who use these machines are at a much greater risk of injury to their lower back, knees, and hips.



However, that is not to say you should never use machines. Machines do serve an important purpose. An important component of any strength training program is safety and nothing beats machines when it comes to this regard.

Machines have several pros such as not wasting time setting up the weight and allow you to track progress efficiently, but more importantly, if you are a beginner, you should most certainly take advantage of this. If you are new to strength training or if you are working out alone without a spotter, machines may be the best bet. For rehabilitating injured athletes, variable resistance machines are preferred over free weights. Also, machines are a great choice for experienced lifters and athletes to flush the muscle with blood after they've pre-exhausted the muscle with lots of compound free weight exercises. A strong strength training program will incorporate a variety of free weights and machines in each exercise session, but the more experienced you become the more free weights should serve as an emphasis of your workout.

Also, rather than sitting when doing an exercise, make sure you stand. So instead of doing seated dumbbell curls, perform standing dumbbell curls. You burn a tremendous amount of more calories having to stabilize yourself and the weights when standing upright than when seated. When you sit, the bench is absorbing that extra poundage. Think critically when you are working out and really analyze the situation presented before you. Think to yourself, "Which exercises are going to provide the most benefit in terms of stimulation to my muscles and which are going to burn the most calories?" Becoming an active learner throughout this process, rather than just doing as dictated, will ultimately be the best piece of advice ever given. Actively processing this information and utilizing your time and resources efficiently is what will be most beneficial to your waistline.



COMPOUND VS. ISOLATION EXERCISES

Not only should we look for free standing dumbbells and barbells when we are in the gym, but the best way to properly stimulate a muscle is to focus on basic, explosive training with compound movements. Compound exercises are exercises that involve 2 or more joint movements and thereby employ bigger muscles and a larger amount of synergistic muscles, whereby isolation exercises are movements that focus on only one muscle, moving only one joint at a time. The main focus of your workout should be primarily on compound exercises, such as the deadlift, bench press, military press, bent over one arm dumbbell row, barbell back squat, hang cleans, etc.



Compound Exercises

Shoulders: Military Press, Arnold Press, Hang Clean and Press

Biceps: Close-Grip Chin-Up (w/ palms facing toward your face), Standing Barbell Curl

Triceps: Close-Grip Pushup, Dips, Close Grip Bench Press

Legs: Stiff Legged Deadlift, Barbell Squat, Lunges

Back: Deadlift, Row, Pull-Down, Pull-Up, Renegade Row

Chest: Bench Press, Dips, Pushup, Incline Dumbbell Press

These types of compound exercises have proven to be most effective to build lean muscle mass because they require the most amount of work from multiple muscle groups that will ultimately increase the production of the powerful hormones testosterone and natural human growth hormone. For instance, the squat not only works every muscle group of your legs (quadriceps, hamstrings, calves and glutes), but also works your core, lower back, and traps amongst dozens of other tiny muscles. Furthermore, your body has to work in conjunction to lift the weight, which not only means that you are recruiting as many muscle fibers as possible to do it, but you are much stronger in these areas, moving more total poundage as a result. This ultimately is going to stimulate the muscle the most and burn the most calories, which will in turn help you on your way to build muscle and burn fat. Muscle growth and fat loss is a systemic process that requires heavy-duty stimulation of the muscle fibers to repair itself to come back stronger and provide powerful hormone production to create an anabolic environment.

Each muscle group is supported by many other muscle groups that work together to lift that weight in the gym. For example, let's say you are working the chest and doing bench press, one of the best compound workouts. You are the strongest (and thus more prone to grow muscle) when you not only have a strong chest for the bench, but also you have strong shoulders and triceps as well as strong back muscles to support the weight and strong legs to power through the movement. Therefore, when you keep working on the bench press, you are also training the shoulders and back and all the interconnecting, but smaller muscles in between. When all these muscle groups work together, you are able to lift and grow more.

In addition, compound movements place the greatest stress on your muscles, which in turn stimulates the endocrine system for more hormonal release, which is vital to muscle growth. Compound movements also keep a muscular balance in your body. If you are only isolating one muscle then that muscle you isolate will grow stronger than the surrounding muscles. Your surrounding muscles can no longer support your stronger muscle and may lead to more injuries. For example, if you are doing quad extensions and isolating your quadriceps more than any other part of your legs, then what will happen when you squat? Your quadriceps may be able to handle heavy weight when you squat but your hamstrings are more likely to give out because it is not as strong or adapted to focus on compound movements like the squat or leg press because each part of

your legs will adapt to the stress placed on them through these exercises. The same exact mentality should be placed on all the muscle groups.

Isolating a muscle is inherently WRONG! It doesn't happen in real life since it is not a functional movement and doesn't make sense from a physiological standpoint. Your body works in patterns of movement, yet it never isolates! Going against your natural coordination pattern and lifting sub max weights is just ineffective when it comes to stimulating your body into growth.

Think about it. When you lift something up, don't you get your core involved into the movement? You never lift something up because that's just not where your body is strongest. To isolate the muscle means you're working with loads that are ineffective to produce a stimulus to grow.

Let's take a look below to gain a better grasp of what I'm talking about:

Session 1: (Isolation-Based Movements)

Barbell Bicep Curls

Dumbbell Hammer Curls

Barbell Reverse Curl

Dumbbell Alternating Curls



Session 2: (Compound Movements)

Pull ups (pronated grip/ Palms facing away)

Chin ups (supinated grip/palms facing you)

Parallel Grip Chins (palms facing each other)

Look at the session number 1. On paper it seems like you would get a massive 'pump' right? Well, in reality, you are actually only hitting the muscle sub maximally with LOTS of repetitions and essentially you are training your biceps for endurance! Your muscle fibers grow by hitting them with intensity and by hitting the fast-twitch muscle fibers that can only work without oxygen for short periods of time, not by hitting those endurance-based intermediate and slow twitch fibers that can work under long periods of time with oxygen.

Now look at the session number 2. You might say "there's no bicep exercises in there". Well, why don't you take a look closer because those exercises require a tremendous amount of biceps in the process of pulling yourself up. Any pulling movement is essentially a curl with a pull attached to it.

Isolating your muscles to an extensive amount is actually counterproductive to your goals. Not only are you at risk of not adding muscle, but you are also breaking down muscle you added in previous sessions. Any exercise initiates a stress response from the endocrine system, which is cortisol.

Low intensity and isolation exercise, by its very nature, never allows the body to reach the intensity required to release growth promoting and fat releasing testosterone and HGH and continually exposes the body to unopposed cortisol which makes weight loss more difficult and *breaks down muscle*. Therefore, most, if not all, exercise should contain a particular level of intensity that triggers the activation of fast-twitch muscle fibers and isolation exercises should never be performed on their own!



Now I am not saying that isolation exercises should NEVER be performed! On the contrary actually, I am merely saying that if somebody has only ever performed isolation exercises, they more than likely to have a body that looks skinny fat than the body of a ripped fitness model in the magazine! The guys and girls with the best bodies go into the gym to perform multiple sets of heavy, compound movements such as squats, bench press, and snatches.

The guys who focus on just isolation exercises are the ones who rarely see any progress. I'm sure you know the guy at your gym that has been curling the same 25 pound dumbbells for 3 months thinking, "maybe next week I'll get stronger/bigger?" Well, it doesn't force enough of an impetus for your muscles to require change or grow.

Now in order to make a limb strong enough to do heavy enough curls to tax the muscle appropriately you need to train it the way it can be trained hardest! Makes sense, right? I don't know about you, but a 200 pound row or a weighted chin up would tax the biceps a LOT more than any concentration curl could! In other words, you have to earn the right to isolate.



Isolation exercises should never be the focus of your workout, but 2 exercises at most with a few sets each at the end of a session will suffice. All in all, isolation exercises are best only after you've developed quite a bit of muscle mass in the first place transitioning from a beginner to more of an advanced lifter and only after you've performed compound exercises within your specific workout.

So why is there such a heavy emphasis on the order of compound exercises and isolation exercises? The key is to do the important stuff first when you are strongest. Your muscles respond when presented with a stimulus that *forces* them to grow. They are only forced to grow when presented with maximal loads. Therefore, you want to challenge your biceps with exercises that present the greatest amount of difficulty such as chins and rows and deadlifts before you

work on your peak contraction with bicep curls.

Isolation exercises target one muscle group and only one joint at a time, so while they won't build the mass you are looking for, they are great to perform to flush the muscle with blood and to further stimulate the muscle with peak contractions. An example of an isolation exercise is the quad extension, which only hits the quadriceps. However, this should usually be performed only after back squats in your leg workout since you want to be strongest during the compound movements.



Below are some examples of isolation exercises per muscle group:

isolation Exercises

Shoulders: Side Lateral Raise, Front Dumbbell Raise

Biceps: Seated Dumbbell Curl, Cable Concentration Curl

Triceps: Triceps Rope Extension, Skull Crushers

Legs: Quad Extensions, Lying Leg Hamstring Curls, Donkey Calf Raises

Back: Seated Row, Rhomboid Cable Squeeze, Alternating Cable Pull, Lat Pull-Down

Chest: Pec Deck Butterfly, Flat Bench Dumbbell Flyes

Your goal in the compound movements should be to train for explosive power, whereas your primary goal for the isolation exercises should be to infiltrate the blood into that muscle only after you've taxed the muscle appropriately with heavier loads.

Therefore, to fully stimulate the muscles, you should incorporate both compound and isolation exercises. So to answer the question as to which are better to promote muscle growth and for injury prevention, compound or isolation exercises, the answer is compound movements.

Nevertheless, if you want to fully maximize *lean* muscle mass, you have to incorporate isolation exercises with compound exercises. Isolation exercises allow you to "sculpt" a specific muscle. You can build up your chest through bench press, but what is going to differentiate you from another muscular guy? You need to do isolation exercises to visually separate your muscles from one another and promote muscular symmetry. Think of your body like a statue: The giant piece of marble is from doing compound exercises; it is essentially your foundation. Nevertheless, each



piece of marble is “sculpted” to make it different from one another, giving it extensive details by doing isolation exercises.

You should always do compound exercises in the first part of your workout and end with isolation workouts. Isolation exercises should be used later in the workout to completely fatigue muscles after the compound exercises have taken place. Isolation exercises specifically target one muscle the best, meaning more blood flow is directed at that muscle. Blood flow is directly correlated with muscle growth, because blood transports essential nutrients to the muscles for growth.



MIND MUSCLE CONNECTION

Developing a mind-muscle connection is what separates the average physiques from the great ones. Often the difference between having a ripped six pack and not is not the amount of weight you do or the number of reps or sets you complete. Instead, it's the mentality that goes behind lifting weights. It's one thing to just hoist a weight up, but it's another to fully flush the muscle with blood and infiltrate it with what is called a pump, as discussed below, making sure your muscle fibers are firing with every rep and squeezing as much blood into it as humanly possible on every peak contraction. In order to do this, you need to enter the zone every time you enter the gym. I'm sure you've experienced this trancelike state during basketball where you seemingly can't miss. Your breathing pattern and lifting speed need to be in tune and you need to visualize your muscle contracting as you perform the movement. Building muscle is not about lifting the weight from point A to point B, but instead about deliberately contracting the muscle as you lift and exert complete control over every inch of the movement.

Arnold Schwarzenegger had one of the best physiques on the planet and he often refers to this mind muscle connection as being the major contributing factor to his musculature. Arnold used to envision gigantic mountainous peaks every time he performed biceps curls. He also used to train his back a very particular way.



He used to envision that there was a nut/acorn in the small of his back and that every time he did a rep he envisioned cracking that nut/acorn by squeezing his back muscles together and holding it there for several seconds before lowering the weight. This gave him a heightened sense of using the muscles intended to be trained during the exercise and to concentrate only on using those specific muscles when performing the repetition. You want the muscle you're training to do the work, and by focusing on the muscle being contracted you will achieve what is called a blood pump, which is necessary to build muscle.

Also, a great technique to help you better develop your muscles is regularly flexing your muscle as if you were doing a posedown. You can do this at home, in the car, in class, or at work. This will help get blood flow to the muscles and extra nutrients to help them grow. Moreover, in between sets, posing a muscle allows more blood to flow to the given area. Furthermore, it will help you further develop that mind-muscle connection between the brain and the muscle seeking to be targeted.

Lifting weights and using your head are not mutually exclusive activities. Going in with an empty mind and just lifting weights is easy, but if you don't have a strong mind-muscle connection, you're just wasting your time in the gym. Seriously.

People often fail mentally on every single set long before they fail physically, especially beginners who don't know their limitations. For instance, have you ever said to yourself, "I'm going to do six repetitions," and you blaze through the first five, yet somehow seem to struggle with the sixth. It's usually because you've convinced yourself beforehand that you can't do another. You have to strive for physical failure instead of mental failure, concentrating on the action of the muscle, while disregarding the number of repetitions that you must complete. You must induce adaptation. That will only happen when you are deliberate with your mind.



ACHIEVING THE PUMP

A good muscle pump (scientific name: hyperemia) is something all bodybuilders should specifically aim for when they enter the gym, as it signals the effectiveness of your training and ultimately, muscle hypertrophy (growth). But what exactly is a pump, and how can this crucial component of muscle growth

be achieved? As with most profound physiological processes, the pump results from the complex interplay of a number of related functions, namely proper weight training and proper nutrition. We train with weights for the sole purpose of stimulating muscle growth, and the pump indicates whether or not we are heading in the right direction. The inability to achieve a pump simply means the conditions necessary for muscle growth are not in place. A pump, in essence, will send your muscles into growth, as it suggests all the muscle-building processes are functioning as they should.



To achieve maximum muscular growth, a pump is essential to your progress and the only way this can be achieved is to train correctly and with the right energy intake, which will allow sufficient blood flow to the working muscles. Working muscles need blood to supply them with the correct amount of oxygen and nutrients to perform, and to remove waste products such as lactic acid, ammonia, and carbon dioxide. When a muscle is trained, blood flow is diverted from many other bodily processes such as digestion, to supply this muscle with what it needs to perform maximally. The blood first needs to become oxygenated through gaseous exchange in the lungs before it is pumped to the working muscles, where it is pooled. That pooling of the blood is what results in that super stretched tight feeling we call the pump. During this pump, a muscle can receive up to four times the amount of blood during training as it would ordinarily get.

If the muscles are working effectively, muscle growth will result from this pump. Muscle growth will also result from the fascial stretching that occurs when the muscle is pumped beyond its normal size. When this fascial layer, between the skin and the muscle, is stretched, room for continued muscle growth is made available. Over time, the pump will also create a greater number of capillaries (tiny blood vessels), which will in turn provide the muscles with more nutrients and oxygen and allow for larger pumps and more growth in the long term. Training has its progressive advantages.



So now that you know the science behind it, how do we achieve this super tight feeling to help your muscles grow? Any kind of training will signal the nervous and endocrine systems to signal the heart to pump more blood throughout the body. I'm sure you've heard of the fight or flight response before. Well this survival mechanism allows the muscles to prepare for vigorous work. When we engage in any kind of physical activity, the increased cardiac output allows for blood to pool in its intended muscles. On the other hand, there is a major difference between creating a stimulus to pool some extra blood and to gorge it with enough blood to create that so-called pump.

Have you ever sprinted a full lap around a quarter mile track? Do you remember that incredible tightness in your legs? If you went your hardest, that feeling is unmistakable. It's almost like a painful feeling that somehow feels numbing and orgasmic. This is called the blood pump and this is what we try to achieve in all of our muscles every time we train.

If you've ever looked at professional sprinters before, you've noticed their bulging muscles that their bodies contain. This is because of the high intensity exercise regimen they follow (i.e.- sprints and low rep training), in which they are always achieving that blood pump to help grow the muscle. A sprint requires an adequate supply of energy to continue the repetitive muscular contractions involved. An all out effort under 60 seconds, preferably within 30 seconds, requires an extraordinary amount of energy and requires an immediately available energy source. However, short bursts of intense exercise are anaerobic by nature and the muscles contract without the use of oxygen and look for an immediate available energy source. A muscle working under anaerobic conditions recruits ATP, creatine, and muscle glycogen to feed the muscle and further deliver this pump. A muscle that does not receive adequate oxygen will fail to continue contracting after an extended period of time, which is why you have noticed that you cannot maintain that full sprint speed for any longer. You can always train your muscles to work harder for longer periods of time, but there are still limitations in how effective your muscles will contract without oxygen. One byproduct of super high intensity exercise is lactic acid, which causes the muscle to fall short in terms of energy expenditure. I'm sure you've heard of the term before. Lactic acid prevents your body from further all-out efforts and it is an efficient muscle's job to flush out the congregated lactic acid by flushing it with blood. The pump is achieved when hormones and signaling factors such as nitric oxide (NO), released in response to the acidity caused by high lactic acid levels, cause local capillaries in the muscle to dilate, thereby allowing more blood to flow into the muscle. Remember, the more blood infiltrating the muscle, the tighter the pump is.



So, this should begin to shed some light on what kind of training you should be achieving every time you lift weights or do cardio: high intensity training where your goal is to come as close to failure as possible. All-out sprints and maximal loads will carry out this blood pump to deliver enough blood and nutrients to

your muscles to help them grow. We will get into this type of training and its effectiveness throughout the next few chapters, but you must also be aware that the pump is also affected by what you eat.



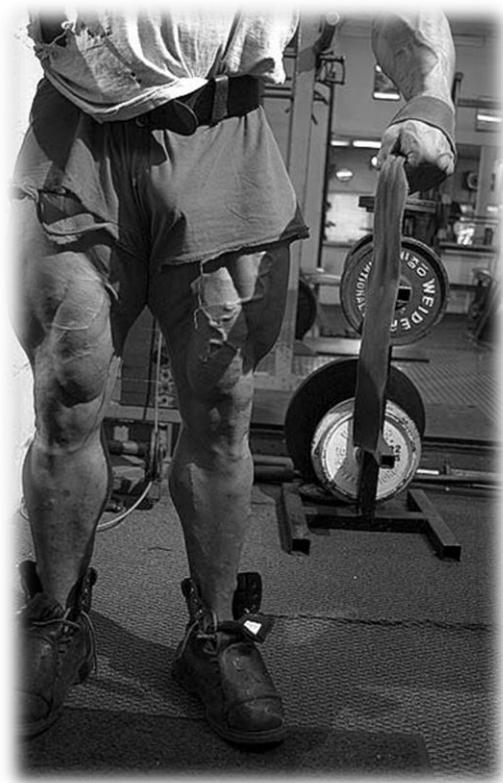
Complex carbohydrates such as baked potatoes, brown rice, pasta, sweet potatoes, and whole grain bread work best to achieve the pump because carbohydrates are the body's number one fuel source, so when the body is almost swimming in carbohydrates, the pump comes very quickly. Nevertheless, not all carbohydrate sources are equal when it comes to this. A lot of people like to drink supplement carbohydrate drinks that contain high amounts of glucose such as Gatorade. The problem with sugary drinks like this is that your body cannot use all of those carbohydrates in one shot since they are fast absorbing. So after around 10-15 minutes, it will shut off its supply and store the rest as fat. When that happens, your musculature won't hold any shape to it at all and your



muscles will look flat like a flat tire, or the opposite of pumped, which is exactly what you want to avoid. However, when you eat low glycemic carbohydrates, your body burns them very slowly and continues to fuel you all the way through your entire workout, not storing them as fat, and thereby creating an incredible pump.

You may be saying to yourself that if nitric oxide is helping so much though then maybe you should supplement with NO₂. It sounds good to do this, however, Nitrous Oxide is present when your muscles contract, which causes blood vessels to dilate. This forces an increase in blood surged into the muscle, which also causes an extreme amount of blood flow to surge back into the heart as well. This could be very dangerous and could cause too much pressure. Supplements are a tremendous health risk. You must be careful what you put into your body.

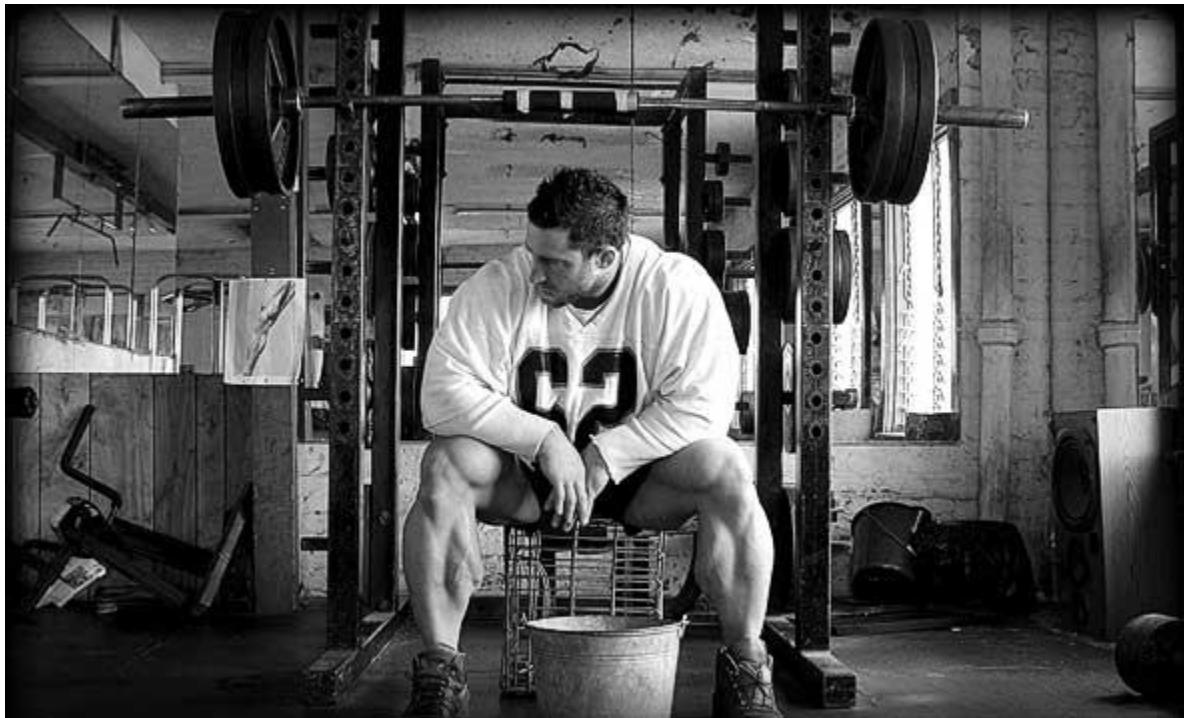
So, there are no supplement shortcuts to achieving the pump. The key really boils down to eating complex carbohydrates throughout the day and especially before you train, and also training with a particular level of intensity. What you want to do when you train is to enter that zone of creating a mind-muscle connection to become completely focused on contracting the muscle on each repetition. Don't just count reps, but focus on the level of strain your muscle is experiencing on every rep of every set. The last two, three, or four forced-reps, when you are knocking on the door of failure, is what will create the pump.



Performing intensity sets like drop sets and strip sets on the last set of each exercise will allow you to achieve this pump that will send your body into a new growth phase. Just remember that your brain quits before your body ever will, so you need to train your mind in pushing through to get the most out of your workouts.



INTENSITY IS KING

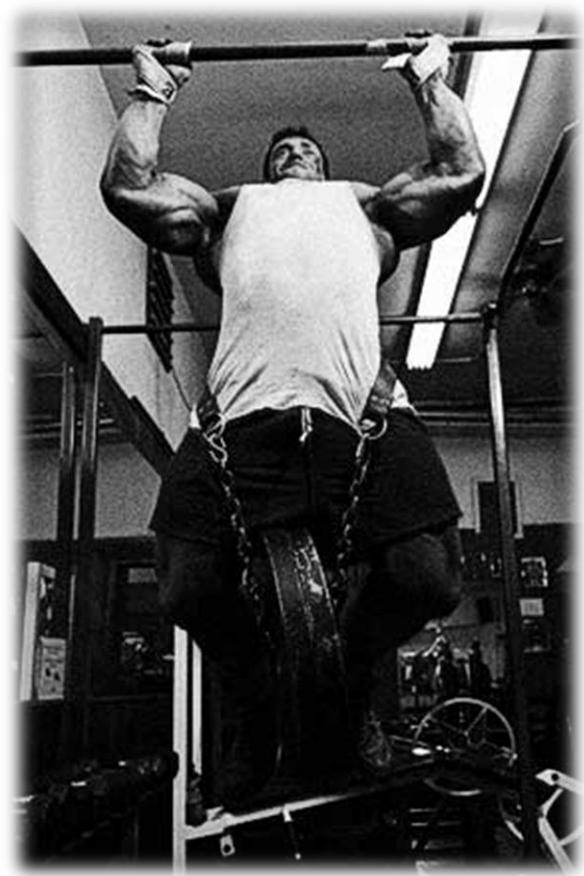


Research suggests that in order to gain strength and size, you have to overload your muscle and push it beyond its present capacity. From this theory of what is called the overload principle, we know that intensity is not only sufficient, but also necessary for gaining muscle.

Whenever you step foot in the gym, you need to get in the mode that you are going to give it your absolute all in the gym. You can go with the mentality that some form of working out is more beneficial than not working out at all, but that will not provide you with the body you want. If you think that a ripped and chiseled physique is only reserved for certain people or those who do some form of performance enhancing drugs like steroids or HGH, you are certainly mistaken. The only reason why they have the body you are seeking for and you don't is because they understand the idea of intensity.

Yet, intensity has several different meanings to lots of different people. For example, Arnold Schwarzenegger in his heyday believed it represented doing a moderately heavy weight until he couldn't lift it anymore, rest a little bit, and then pound out dozens of sets per body part until his muscle was "exhausted". This is called heavy-duty volume training. For other "experts" like Arthur Jones, Casey Viator, and Ken Leistner, it meant going balls to the wall for an entire session by doing one to two incredibly intense sets by reaching absolute failure, or a state where that specific body part could not perform any more work under such exhausting conditions. The latter, which is called High Intensity Training, is what is the most effective and efficient way to gaining muscle since that is where you are performing maximal effort.

Mike Mentzer, the king of High Intensity Training and owner of one of the best physiques ever known to the bodybuilding world (the only bodybuilder to score a perfect 300 in the Olympia), once said, "You can train hard and you can train long, but you can't do both". Remember our example above about a full out sprint to achieve the pump? Under this premise, you can only perform at top speed for a brief period of time before your muscles can't perform any more work without oxygen. Going anything less than top speed is referred to as a submaximal load. Maximal loads are what stimulate the muscle the most, so anything short of that is inefficient. Hypertrophy only occurs as a response to grow when presented with stimulation that produces maximal tension.



An all-out sprint on the track or set in the weight room under maximal loads is what damages the muscle fibers completely and provides the stimulus for the muscle to gorge itself with blood and ultimately grow back stronger. The reason why this type of training is most effective to your goals is because of the particular type of muscle fibers that it

damages. Every muscle group is made up of slow (Type I), intermediate (Type IIa- fast oxidative), and fast twitch (Type IIb- fast glycolytic) muscle fibers. Slow twitch muscle fibers are very efficient at using oxygen to generate more fuel (known as ATP) for continuous, extended muscle contractions over a long period of time before they fatigue. Intermediate fast-twitch muscle fibers can use both aerobic and anaerobic metabolism almost equally to create energy. Fast twitch muscle fibers get their name by being able to fire rapidly (contracting in under .01 seconds or less after stimulation) and work only under anaerobic conditions. Since they are without oxygen, that means they fatigue very easily.

Nonetheless, working these fast twitch muscle fibers in preference to your slow twitch muscle fibers is what will make or break your physique. Slow twitch fibers do not produce any form of muscle growth, because in order to activate your slow twitch muscle fibers that means you are working with incredibly submaximal loads. Activating your fast twitch muscle fibers means that your muscles are firing so rapidly because the intensity, or weight, you are working with is near maximal to present hypertrophy. Remember, the more muscle you have, the more fat you burn. That goes for you too ladies.



Moreover, not all muscle fibers are created equal. Slow twitch fibers are about half the diameter of fast twitch muscle fibers and take three times as long to contract. By implementing your fast twitch muscle fibers you are activating a much larger muscle, indicating that it requires much more energy (or calories) in order to activate that muscle, and are working much harder during the actual process since they are firing three times as fast as slow-twitch fibers. It requires an exorbitant amount of energy to allow your fast twitch muscle fibers to respond with such vigor. Moreover, fast twitch muscle fibers hold significantly more glycogen than slow twitch muscle fibers. By breaking down more glycogen, you more easily tap into your fat reserves at a quicker rate than if you were just working your slow twitch fibers. That is why you rarely see a fat athlete who participates in a sport that requires short bursts of energy for 5-10 seconds that require activation of your fast twitch muscle fibers: football, track and field, boxing, basketball, etc.



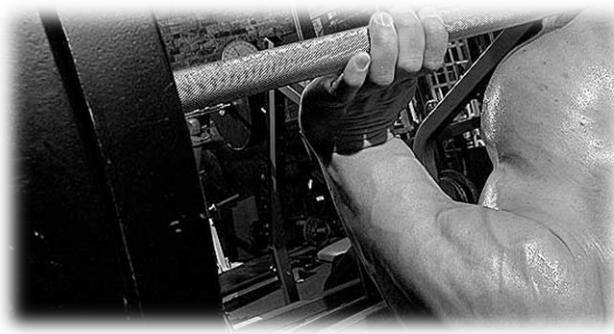
Intensity is the most efficient way to burn fat not only because of the calories that it burns during exercise though, but also because of the recovery process that takes place after. First off, it takes a lot more energy to recover and repair a larger muscle fiber than a smaller one. More importantly, high intensity exercise elevates your metabolism by around 20% long after the exercise is done. Hormonal changes occur after the exercise that increases fat oxidation following the anaerobic workout. You will have an increased metabolism throughout the rest of the week from this type of central nervous system stimulation. Studies show that oxygen consumption and fat oxidation increases considerably, which requires a lot of energy expenditure to maintain homeostasis. For instance, when comparing individuals performing cardio, studies show that there is a 9x greater decrease in subcutaneous skinfolds (fat)



when doing High Intensity Interval Training than traditional endurance based workouts.

Mike Mentzer trained for a total of 20-40 minutes, 3-4 days a week only, and had one of the best bodies ever. Mentzer is not the only one to understand the genius behind this theory. Some of the strongest and most ripped up athletes ever followed H.I.T. training such as Ken Leistner, Kevin Tolbert, Dorian Yates (6x Mr. Olympia), Lee Haney (8x Mr. Olympia), Chris Cormier, Lee Priest, and Mark Dugdale. Ken Leistner, at a body weight of less than 200 pounds, was able to perform a 405 lb. back squat for 23 reps following this kind of intensity training regimen over volume.

So instead of training like you typically do for length of time or total number of sets or reps, your number one goal in the gym should be to go as intense as possible, especially during each set. The only time frame you should stick to is trying to keep your rest time in between sets for a minimum and to keep your workouts within an hour, at most, to ensure efficiency and spare your muscle tissue. Any more time in the gym than that will send your testosterone (a naturally occurring hormone that aids in muscle growth and fat burning) into below adequate levels and your cortisol (stress-induced hormone that is a muscle killer and fat inducer) skyrocketing.



HOW DO WE GO INTENSE?

This leads us to our next part. So, now that you have a general understanding that activating your fast twitch muscle fibers and going intense during your workouts is what provides you with results, how do exactly go about achieving intensity?

Intensity, in the sense of the word that I'm referring to, means contracting every muscle fiber in a specific body part to the point of failure. By reaching failure, you exhaust the muscle to the point of stimulation for it to grow.



So, how do you reach failure? This is a touchy topic and one that is constantly debated. Many people think that failure means the point that you cannot complete another rep for the weight you have in your hands. For instance, if you have 225 pounds on the barbell bench press and you can't get it up for #6, people constitute failure as being rep #5. Nevertheless, this cannot mean failure in my eyes. That is clearly mental failure, but not physical failure.

After you complete 5 reps of 225 pounds, you can probably do another rep of 215 pounds, and then after that, 200 pounds for another couple of reps, and then 190 pounds, etc...all the way down the line. So, theoretically, failure actually occurs at the point when you cannot do one more rep of one pound for that particular body part. Now, if you can envision this properly, then you'd understand how incredibly intense of a set this is. Basically you would have to perform dozens of sets consisting of your One Rep Max (1RM- or the most amount of weight performing only one rep with perfect form), one done directly after another. Now, there is no machine that can do this for you other than you changing the pins or changing the weights manually, so you have to be actively thinking throughout your sets of trying to achieve this type of intensity.

This is the theory of failure, and you can come pretty close to doing it by implementing strip sets and drop sets to reach that point of failure that I'm referring to. We will get into more about how to exactly achieve this in the next section, but I want to attack a more direct topic first. Most gym-goers (even the advanced ones) approach training the completely wrong way, thinking they go intense, but never actually doing so. Intensity in this realm is an entirely new way of thinking than what you are used to.



Now, there is a major difference between volume and intensity. Most people who are heavy gym goers (and I'm talking about guys who go in 5 days a week or more, yet see no progress) typically follow that of the volume nature. To give you an example of what volume training is, volume trainees typically will do an incline dumbbell press with 80 pounds, let's say, and do them for the amount of times that they can complete the process (i.e.- 10 reps). Subsequently, they rest 60-90 seconds and perform the set again until they can complete the process over (i.e.- approx. 9 reps this time). They then move from exercise to exercise and do the same thing, yet never reach the point of true failure and under-stimulate the muscle fibers, yet overtrain their muscle with submaximal loads (which will be discussed in more detail later when referring to overtraining). The volume guys basically just incorporate their slow twitch muscle fibers, and intermediary twitch fibers. However, most volume trainees fail to implement their fast twitch glycolytic fibers for extended periods of time in their exercise and thus never stimulate their muscle to the point in which it is forced to grow.

However, there is a fine line if you lift beyond that point of failure where you overtrain. Overtraining is not just overdoing it for the sake of wasting time, but can actually be detrimental to your gains. Overtraining doesn't mean that you just won't benefit yourself anymore by doing more sets and more reps, but it can mean that you are irreparably harming the muscle to the point where you are damaging it so it cannot grow back stronger or larger. However, overtraining can serve one benefit: mentally. Dave Palumbo is a huge fan of this and has said that his legs were able to respond better because he overran so much. This gave him a better mind-muscle connection, however, he needed to stop overtraining eventually to see the physical benefits. So let me spare you the overtraining but give you the takeaways: you can go further than you think, but you want to stimulate not annihilate the muscle.



So we have to be intense, but we need to know when to back off of that intensity. Have you ever looked at a sprinter compared to a marathon runner?

The sprinter certainly has the more attractive physique, and it's the idea of intensity that provides that difference. Volume trainees are the marathon runners, going for long periods of time in the gym using minimal weight throughout their routine for a longer period of time. The intensity training guys

are the sprinters, compacting an incredibly intense session in a shorter period of time.

By going to complete failure, you exhaust all three sets of muscle fibers, without damaging the slow twitch and intermediary twitch muscle fibers beyond the point of repair. You need to get in the mode of intensity where you have working sets to complete failure. However, doing too much of this training (i.e.- every set and/or every single day) is a quick recipe for disaster. The type of intensity training that I'm referring to is "High Intensity Stimulation Training". H.I.S.T., as I call it, is performing one set to complete failure per exercise, but no more than that (which will be discussed in the next chapter). You must have proper warm up sets for each exercise to prime the muscle for the stimulation in which you will be attacking the muscle with, but there will only be one working set per exercise that will reach failure as previously discussed. You can implement a few different exercises in one workout session, but only one set to failure in each of those exercises is not only sufficient enough for growth, but necessary. Any more than that will lead to overtraining, not bettering yourself in any regard. Overtraining in this regard is very damaging to not only your skeletomuscular system, but your central nervous system and organs. There is a fine line that you need to pay attention to but ultimately this type of High Intensity Stimulation Training will stimulate those muscle fibers to the point in which they will be compelled to grow back stronger.



Intensity in one set provides the stimulus to grow, but any more intensity sets will actually provide more damage than good. Therefore, intensity is only half the battle. Recuperation is the other half. Insufficient recuperation impedes intensity, and insufficient intensity impedes muscle growth.

We can all agree that elite sprinters have the best physiques of any sport. Sprinters go full throttle during the bouts in which they exert themselves, however, they do not repeat a sprint until they can perform the sprint at their full speed or else they are wasting their time (theory of intensity: they want to engage their fast twitch muscle fibers that take the most energy and time to recover).

Powerlifters take a similar approach. If you look at powerlifters, their method of training allows them to get stronger every single week. Their sole purpose is to increase the pounds they can handle and that means dealing with maximal weights, mainly in the rep range of 4-6 reps through each of their sets.

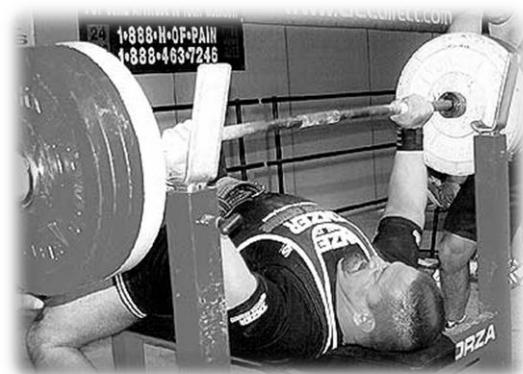
Most professional 200 pound

powerlifters, who do not partake in performance enhancing drugs, can lift more weight than 300 pound bodybuilders who are at significantly lower body fat percentages. Most people who lift regularly very rarely increase their strength week to week, yet powerlifters do it on a week-to-week basis. This type of training works to help you grow stronger without the use of performance enhancing drugs. A lot of professional bodybuilders perform volume training, but when you have anabolic steroids doing a large portion of the work for you outside of the gym, practically the slightest form of stimulation will work. High Intensity Stimulation Training will help with muscular development naturally.

Yet, the thought you are puzzling yourself with is that you know powerlifters who are very strong but look pudgy or fat.

It is true that most powerlifters don't have the bodies of a sprinter. Nevertheless, there is a recognizable difference here that creates the difference in physique between powerlifters and sprinters: Body fat percentage. Powerlifters have just as much muscle mass as their counterparts. However, A) their diet is not conducive to staying lean, and B) their training consists of intense sets, but not intense workout

sessions. With High Intensity Stimulation Training, you need to incorporate dozens of sets within each of your workouts for caloric output. Hypertrophy serves a purpose in allowing more reparation. However, not all will be to complete failure in order to prevent overtraining.



Most powerlifters don't look like a sprinter. However, sprinters don't train to do one 100 yard sprint and then call that their entire workout. They sprint as fast as they can for a period of time, rest for several minutes and then perform another sprint at full speed (repeating this process several times in a session).



Dorian Yates, a 6x Mr. Olympia, used to train with incredible intensity for one to two sets per body part, making sure he gave 100% effort throughout that one set and resting adequately before he attacked his next set so he could give 100% again. Dorian said, "Rest periods between sets are as long as I feel is required. Many bodybuilders think training is 50% aerobic and 50% anaerobic. That is a mistake. They don't rest enough between sets; their body is not able to regenerate enough energy to exhaust that muscle to absolute fatigue, which is the point at which optimal muscle growth begins...I perform a set with 100% energy to 100% failure--then beyond, to 100% fatigue--and I won't do another set until I feel that the muscles have recuperated 100%, however long that takes. For example, when I take squats or leg presses to total fatigue, I know from experience that it's likely to be at least five or six minutes before I'll be able to even think about what my address or name is, let alone do another set."

Nevertheless, High Intensity Stimulation Training does not replicate that of a powerlifter or a sprinter. It takes the best of both worlds and replicates a modification of a sprinter's intensity workout and a bodybuilder's volume stimulation workout together in one to provide awe-inspiring results in the shortest period of time to build strength and power while getting you ripped in the process.

The core root of this type of training is that anytime you spend in the gym must be done with the utmost intensity throughout the entire session if you want to develop the physique you've always dreamed of. What H.I.S.T. does, is it takes your time in the gym to be the most effective and efficient use of time. You go from set to set to set with minimal rest in between sets, performing one incredibly intense set within each exercise per body part. Supersets and giant sets are also wonderful tools to help you get shredded throughout this process as well.

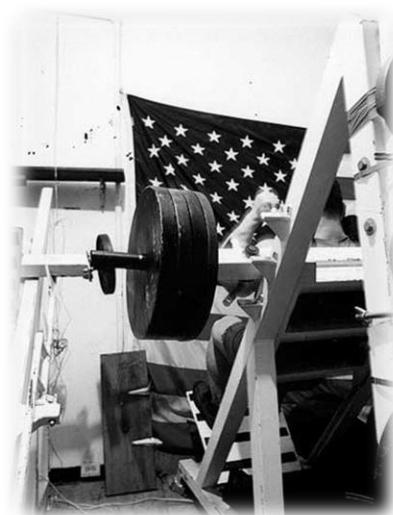


H.I.S.T. - REACHING FAILURE

H.I.S.T. presents an opportunity for you to go to failure with maximal loads, while volume training does not work to continually gain muscle long term. Trainees using volume training works in the beginning but not because of the type of training. They actually induce adaptation by incorporating resistance training they've never experienced before. It's taxing their muscles for the first time and the muscles will respond. However, soon the progress slows and then basically stops. That's because you are using the same weights as you did last week and you're expecting different results (i.e.- greater rep ranges which will signal to you to raise the weights). There are too many mental limitations with volume training, where your subconscious mind will prevent you from going to failure. It won't work after a while. Without the use of performance enhancing drugs, which I do not condone (I am in this for health and longevity), working a muscle to failure and resting is the only way for it to grow.



The well-known "all or nothing" principle of muscular-fiber function states that individual muscle-fibers perform work by contracting, by reducing their length, and that they are incapable of performing various degrees of work; that is to say, they are either working as hard as possible, or not at all. When a light movement is performed, it does not involve a slight effort on the part of a large number of muscular fibers; instead, only the exact number of fibers that are required to perform that particular movement will be involved at all, and they will be working to the limit of their momentary ability. The other, nonworking fibers may get pushed, pulled,



or moved about by the movement, but they will contribute absolutely nothing to the work being performed. This is why steady pace cardio exercise does not build muscle. Muscle increases your metabolic process and burns fat. If you want to lose fat, and keep it off, you have to develop muscle.

So it becomes clear to all of us who wish to develop our muscles, for whatever purpose, in order to involve all of the muscle fibers in the work, the resistance must be so heavy that all of the fibers are required to move it. Unfortunately with conventional equipment, this is extremely difficult to do. This is because all of the individual muscle fibers cannot be involved in the work unless the muscle is in a position of full contraction and the resistance is still applied at this point of contraction. Sounds pretty complicated, and it can be difficult with conventional equipment. However, with the right training partner who helps you do those last few forced reps, you will see results that you never saw in the past. You need to go beyond failure to get the results you seek. Yet, that one set is critical, but by implementing more than that, you will be impeding your body's growth responses.



Think of exercise as a drug. When you take medicine, they give you the MED (Minimum Effective Dose); nothing more or less than you need for the best result. Anyone who takes more or less will suffer in one way or the other. It is the same thing with muscular development. You need to just do only what is required and nothing more. The bodybuilding magazines that preach spending several hours in the gym are tailoring their program to a select few individuals who take drugs to help stimulate their development. This will eventually cause them illness. It is counter intuitive to believe that more is better. Without the drugs, these super bodybuilders would make minimal to no gains because their muscles are overtrained and have no ability to recover naturally. Just take a peek at what happens when they stop the steroid cycle.



So what's the formula? Work out to maximum intensity with as much weight as

possible (without hurting yourself) for a short burst (1 set per exercise to failure) and go home. Come back to the gym only when you are fully recovered. That is it! You will make gains you never dreamed of.

Some unscientific minds would like to think that when a muscle is fully contracted all of the muscle fibers contract at the same time. Although a fully contracted muscle requires all of the muscle fibers to shorten at the same time, it does not follow that even at full contraction under a light load; all of the muscle fibers will be involved in the work. It is scientifically proven that only the muscle fibers required to meet the load will be called into action. This is great for body movement, not so great for muscular development.

Thus, in order to involve 100% of the fibers in a particular movement, two conditions are required:

- 1) The muscle (and its related body part) must be in a position of full contraction; AND
- 2) A load must be imposed in that position that is heavy enough to require the work of all of the individual fibers.

Cardio needs to be performed the exact same way doing intervals at full speed and going easy until your heart rate recovers and doing it over and over again for 20-30 minutes and going home. Why spend more time in the gym than is required to be super fit and have the physique you want? I use my time for all kinds of productive things. There is no need to waste it all in the gym. You can have a life!



ONE CRAZY SET

The beginners don't do enough training, but many amateurs do the wrong kind of training and do too much. A lot of people are so caught up in the bodybuilding craze that they have this false perception built up in their minds that the only way to build muscle is to pound out set after set until they are blue in the face because that is what they've been told in magazines. The kinds of people I'm talking about don't feel "right" unless they are in the gym working for hours a day on one body part. You have to understand that up to this point you've been brainwashed that more is better.



Is this productive or counterintuitive?

It's hard to believe that something like weightlifting can be controversial or cause differing opinions. Weightlifting is weightlifting, right? Doing any kind of exercise will make me better off, right? Partly true- and when something's partially true, that usually means it's fully wrong. What?? How?? Why??

First off, believe it or not, there is a right way and a wrong way to train. Doing some exercise is obviously better than none, but doing too much exercise is actually counterproductive. There is such a thing as overtraining, which could actually leave you worse off. You get more tired and sluggish, more injury prone, more susceptible to disease and colds, less productive at work, etc. than if you never trained at all. Not to mention your body will never gain muscle mass and will actually put on body fat as an attempt to preserve its natural state when you overtrain.

Every time you workout, not only are your muscles working to their maximal potential, but a lot of strain is placed on your internal organs and your central nervous system. Working out, while providing endorphins and enhancing mood, is actually very stressful on the body. Some stress is good as it creates a proper working environment (too little stress will result in inadequacies), but too much stress is very damaging and debilitating. Following too much training will actually place too much stress on the body. This results in a hormonal imbalance that will leave you catabolic (muscle wasting and fat building) as the cortisol (stress induced hormone) increases and testosterone (precursor to muscle building and fat burning) decreases.



Doing too many sets to failure will place your body in too much of a stressful situation, in which it cannot recover properly. Your body needs to be placed in the proper hormonal environment for the body to grow muscle and burn fat. Too much training disrupts the hormonal environment and will actually do the opposite of what you intend.

Therefore, we need to do the right amount of sets to failure. But how many is optimal?

I conclude that one set to failure is not only all that it takes, but the most optimal. Does that mean you only do one set in your entire workout? No! You need to perform warm-up sets to prime the muscle for that one all-out set. In addition, you need to do cool-down sets to flush out the ammonia, toxins, and lactic acid that built up from the stress you placed on your body and muscles during that one set to complete muscular failure.

Nonetheless, your definition of muscular failure and my definition of muscular failure are most likely on completely opposite ends of the spectrum. Failure does not occur when you put 225 lbs. on the bench press, lift it for 9 times and because you can't get it up for the 10th rep, you stop. Many people refer to that as failure. In spite of this, do not get confused because of the misuse and misunderstanding of this commonly used term. Too often do I see people refer to their cowardly sets as reaching failure. It is just that they are either a) uneducated on how to properly perform an adequate failure set; or b) their mental constraints were too tight to allow their bodies to experience failure. They may be uncomfortable at that present moment in time, but definitely not realizing what their muscle is actually capable of once they unlock their minds to allow their bodies to experience such pain. They have not reached complete exhaustion to the point where there is a total cessation of performing potential additional work.

So let's refer back to the previous example of the 225 pound bench press. Stopping after 9 reps may mean you have failed to perform 225 anymore, but think logically here. Isn't it possible that you could perform 220 for 1? And then 210 for another? And then 200 for 2 additional reps? And so on down the line? The answer is yes! To all of the above. That means your muscle technically has not reached absolute failure when failing to complete rep 9. Your muscle still has juice left in it to continue to work. Therefore, theoretically, failure would have to mean that you've worked your muscle so hard that you couldn't lift one more pound off of your chest for one more rep. Obviously that is very hard to achieve and practically unrealistic because by the time it takes you to lower the weight, your body will have already recovered to'



use such light loads. But do you get my point? That should be the standard for what you are trying to achieve when attempting to reach failure. You've got to apply more effort than what you are currently doing. That one set to failure needs to be the definition of living hell if you want to see the best possible results.

You need to make sure that throughout this intensity set, you really give it your all. It is going to require a great deal of mental toughness and will necessitate you to break through the comfort zone. The body is so much more capable than what you think. It's up to the mind to allow it to reach new heights. Hopefully there will now be a convergence of your definition of failure and my definition of failure.

Focusing on quality, not quantity is what is important here.

Stimulation occurs when you've gone to failure. On the other hand, that does not suggest to you that you should go to failure each and every set. Studies show that stimulation occurs with just one set to failure and that anything more than that provides no further stimulation. The muscle fibers are completely torn with that one failure set. Going to failure set after set is going to damage them to the point where overtraining occurs.

There is such a thing as overtraining and overstimulation to the point where repair cannot adequately take place. Once a muscle has been thoroughly stimulated, anything applied further beyond that can actually hurt you, hindering growth, rather than supporting it. Think about it. If you damage the fibers properly, then they are forced to repair. Nevertheless, if you stress it further than that, you are trying to damage already torn fibers to the point where it takes that much longer to repair them just to reach the level that they were at prior to exercise. Now logic may tell you that the more they are damaged, the more they are going to rebuild past their normal level. However, this is not the case. Once the muscle fibers are torn, that's all the muscle requires to stimulate growth of the muscle to develop stronger and bigger.



8x Mr. Olympia, Lee Haney, known by many to be one of the greatest bodybuilders of all time, always preached to “train to stimulate, not annihilate”. He also believed that “it doesn’t take a ton of weight to stimulate a muscle to grow, just the correct stimulus.”



To achieve this correct stimulus, you will want to choose one set of one exercise per muscle group where you will go all-out for that set using one of the following to do so:

- **Drop Set-** When you cannot complete another rep on your own with the weight you currently are performing, drop the weight down and bang out some more reps without any rest in between. In a 2-set drop set, decrease the weight so that you can perform at least 8 reps on your second set.
- **Strip Set-** This is a drop set, but performed multiple times. Perform a three, four, five, or six set drop set, where you continually lower the weight upon each successive set. In a strip set, the range of reps is up to you, but make sure you mentally push through to get as many done as you can with strict form.
- **Forced Reps-** When you cannot complete another rep on your own, have a training partner assist you by applying only the required help necessary for you to keep the weight moving for extra reps. Shoot for 5-6 more reps with the assistance.
- **Negatives-** Using heavier weight than you are used to, lower the weight very slowly on the negative portion of the rep (it should take 4-5 seconds to complete that half rep) and have a partner help you as much as necessary on the positive portion of the rep. For instance, aim for 6-8 total reps on a weight that you possibly could only do for 2 reps with your partner’s assistance.

- **Rest-Pause Theory-** Take brief rest periods during a set to squeeze out more reps. For instance, if you use a weight you can lift for 6 reps, only do 2-3 reps. Take a brief rest of up to 20 seconds at most and try for another 2-3 reps. Rest again and repeat the process. You will essentially lift the same weight you can do for 6 reps, but because of the brief rest periods you will be able to get about 12 reps in this one set.
- **5, 5, 5-** This set consists of 5 fast reps (explosion of only 1 second for both the negative and positive portion of the rep), followed by 5 very slow reps (5 seconds on each the negative and positive portion of the rep), then followed by 5 normal reps (2 seconds on each the negative and positive portion of the rep). This works all twitches of the muscle fibers. Keep the same weight for all 15 reps, but make sure a proper weight is chosen, where you are really struggling to get those last 5 in. Have a spotter help you. Also you can vary it so you start out with a heavy weight for the first 5, then immediately after, with no rest, use a low weight (around 40% of your 1 rep max) for the 5 very slow reps, and then raise the weight for your 5 normal reps (around 60% of your 1RM) for the 5 normal reps.
- **Giant Set-** Using multiple exercises that focus on the same body part, one set consists of performing at least 3 exercises in a row without rest. For instance, during back you could do a pull-up straight to a bent over barbell row straight to a wide grip lat pulldown; ensuring that there is no rest in between the set.
- **Slow and Controlled Reps-** Take 4-5 seconds on each portion of the rep. Have a spotter help you just enough when you've failed.
- **Pause Contraction Reps-** Pause at different phases of the movement to realize an incredible contraction. For instance, during a squat throw on 50% of your one rep max and pause halfway for 3-5 seconds, then pause at the bottom position at parallel for 3-5 seconds, and then back up halfway with a hold, and then at the top with a hold (that is one rep). Complete it as many times as you can. Once you can't hold it anymore, bang out as many normal reps as possible with the help of a spotter. You can switch up the times you are paused. For real intensity, hold it at the bottom, midway, and top positions for 20 seconds at a time.
- **Peak Contraction Reps-** Hold the peak contraction for up to five seconds on each rep. Squeeze the muscle as hard as you can before starting the next rep

- **Rep Overload**– Instead of performing your normal rep range, which most people keep within the 6-15 rep range, you are going to shoot for 30, sometimes, 50, and even up to 100 reps. Choose a moderately heavy weight but one where you can perform a good amount of reps. Keep focused and keep pushing them out for an incredible amount of reps. It's really all mental.
For instance, put 135 on your back for a squat. Bang out 10 at a time, hold at the top position for 5 seconds and breathe, then bang out another 10 reps, and another 10 reps and so forth until you've reached failure.
- **21's** - Dividing the movement into three parts. The top, bottom and whole movement. Most commonly done on curls where 7 tops are done then 7 bottoms and then 7 full reps. Any combination of tops and bottoms can be used however. I prefer to do the seven full first that way the partials are only done when the full movement has already been trained to failure.
- **10 to 1** - Several different variations on this one. You can start heavy and do one rep, strip some weight and then do two reps and carry on this way until you hit 10. Another is to start at 10 take a couple seconds rest and then do 9 and carry on till you get to one using the same weight. The last is to keep the same weight on all sets but hold the contracted position for 10 seconds, lower and then hold 9 seconds and so on till you're done.
- **Running the rack** - Can be done up or down the rack (dumbbell holder) but usually down. This is almost the same as a drop set where you use a set of dumbbells to failure and then select a lighter pair to continue on. You can continue on down the rack as far as you want but three drops is most common.

So applying these basic principles, a workout will look like the following:

Legs- Quadriceps, Hamstrings, Calves (Increase weight with each successive set)

- Bike
 - 5 Minute Warm-Up Set
- Leg presses
 - 30 Rep Warm-Up set
 - 20 Rep Warm-Up set
 - 5, 5, 5 Set
- Back Squats
 - 20 Rep Warm-Up Set
 - 10 Rep Warm-Up Set
 - Rest 5 minutes
 - ***All-Out-Set*** 15 Reps + 5 Forced Reps (help with spotter), Strip Weight down with no rest- 15 Reps + 5 Forced Reps (help with spotter), Strip Weight down with no rest- 15 Reps + 5 Forced Reps (help with spotter), Strip Weight down with no rest- 15 Reps + 5 Forced Reps (help with spotter)
 - Rest 5 minutes
- Leg extensions
 - 30 Rep Warm-Up set
 - 20 Rep Warm-Up set
 - 10 Rep Warm-Up Set
 - 15 Peak Contraction Reps
- Stiff-legged deadlifts
 - 15 Rep Cool-Down Set x 2
- Standing calf raises
 - 30 Rep Warmup Set x 2
 - 30 Rep Warmup Set x 2
 - Hellish 100 Rep Drop Set
- Seated calf raises
 - 30 Rep Cool-down Set x 3



So the question you may be struggling with is what is the difference between a warm-up set and what does it do. Well, a warm-up set does not go to failure. Instead, it is there to stimulate the muscle and get blood flowing into the area to deliver that pump that will be achieved once you maximize your muscle with your one all-out

intensity set. The warm-up sets that you should do should be done at a progressively increasing intensity. So for instance in a 4 set exercise, your first set will be done at around 40% intensity, your second warm-up set will be done at about 60% intensity, your third at about 85-90%, and your last set will be done at 100% intensity trying to achieve complete failure. So, in essence, you are only going full throttle on one set of your exercise, preferably your last set of that exercise (nonetheless, sometimes it is important- you have to feel your muscles out and do a lot of experimenting with how your body feels to know when to implement warm up sets- remember, your goal, in addition to going to failure on one set, is to achieve the pump). So while you are not going to failure on those previous sets, the warm up sets are there to warm the body up and prime the muscle so it is prepared for the hellish set at the end of the exercise. The warm up sets in each exercise is what serves as the stimulation by flushing the muscle with blood and priming it for growth to prepare for the failure set. It is like having a Ferrari in your garage on a cold day. You're not going to step on the gas full pedal as soon as you turn on the ignition. You need to let the car warm up first before you can use the car to its fullest potential. There should also be several cool down sets where the sole purpose is to further achieve the pump by flushing the muscle with blood and removing the toxic buildup from the intensity sets. These sets will usually be performed at around 60-70% intensity.

H.I.S.T. allows your muscles to be primed for growth. Hence, you are going full intensity to overload the muscle and abide by the “all-or-nothing principal” and that is often neglected in volume training, but stimulating your muscle enough to achieve the pump that is often neglected in traditional H.I.T. training. It simply is the best of both worlds.



We can illustrate how H.I.S.T. works by comparing a sprinter and a marathon runner. Who has the better body and is usually leaner? Don't you have friends that run around endlessly, yet have a gut? I know many who run upwards of 6 miles a day, yet don't see any improvements in their physique or the amount of fat they lost. Clearly, sprinters have the best bodies and their training of doing multiple warm up sets and one traditional all out sprint to the highest degree of effort is what forces their muscles to develop. It is the activation of their fast twitch muscle fibers that promotes growth. If utilizing your slow twitch muscle fibers promoted growth then marathon runners would have lots of muscle mass. We know that is clearly not the case.

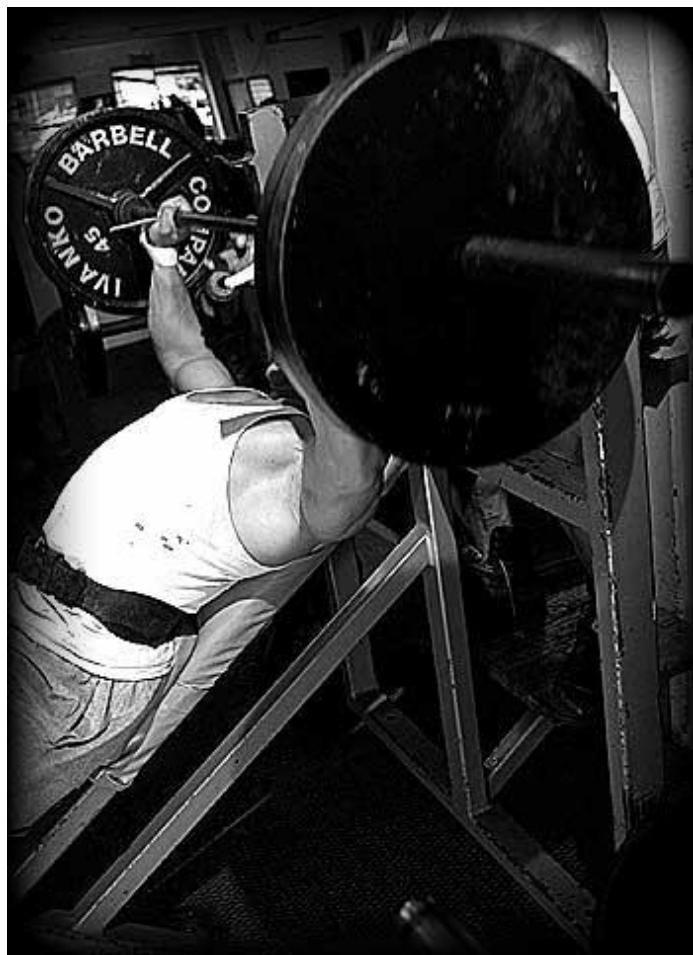


So the next question we must ask ourselves is how long can you maintain an all out sprint before you are forced to jog? The answer is that it does not take very long. This philosophy needs to be applied into the gym; that's why you need to stay in a relatively low rep range, and keep the intensity/weight high enough that it forces you to fail in that rep range. Moreover, you cannot do too many sets to failure. For instance, if you do 10 sets in the gym, it is physiologically impossible to perform an all-out sprint during each of those 10 sets. Each successive sprint will be slower than the one before it and if we're not taxing our body with as much force as possible to present hypertrophy, then there truly is no point to even performing it other than increasing your VO₂ max and aerobic capacity. Nonetheless, even if you were able to do so, the effect would be so detrimental that your body would be so depleted and forced to spend more time recovering from your workouts than actually growing from them.

Intensity in one set provides the stimulus to grow, but any more intensity sets will actually provide more damage than good.

However, that one intense set needs to be absolutely crazy; “a life-sucking, flesh frying torture”, as Dorian Yates would say, that takes pretty much everything out of you. Often times, the incredible intensity it takes you to get through this workout will force you to insert multiple rest days to not only recover to grow, but to give you enough physical and mental energy to get through your workout. This left Dorian Yates with a schedule that looked like the following:

- Day 1: Deltoids, Traps, Triceps, Abs
- Day 2: Back, Rear Deltoids
- Day 3: Off
- Day 4: Chest, Biceps, Abs
- Day 5: Off
- Day 6: Quads, Hams, Calves
- Day 7: Off



BUILDUP VS. BREAKDOWN

The goal of any training program should be to work your tail off in the gym. A great workout does indeed require incredible intensity, heightened focus, and reinforced determination. However, what separates the great physiques and strongest pound-for-pound athletes alike from the “newbies” is the intelligence behind lifting weights. In other words, it’s not how much you do, but it’s how smart you do it.

There is such a thing as overtraining and overstimulation to the point where repair cannot adequately take place. Once a muscle has been thoroughly stimulated, anything applied further beyond that can actually hurt you, hindering growth, rather than supporting it. Moreover, every time you exercise your central

nervous system and organs are taxed. Working out is very stressful on the body and all kinds of toxins buildup in your body as a result. Working out every day is not just a bad idea, but comes with a range of health problems such as insomnia, achiness, pain in muscles and/or joints, fatigue, headaches, elevated pulse, lethargic energy, unmotivated, increased susceptibility to colds, loss in appetite, and a severe decrease in performance.

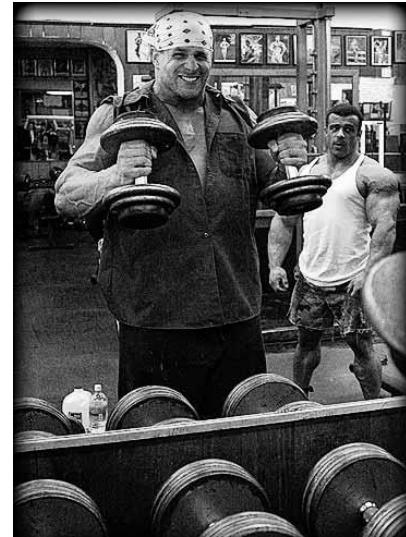


The cause of overtraining is simple. You are not giving your body enough time to repair itself. Not only does your body need to operate efficiently at what it normally does such as its daily metabolic functions like digestion and respiration, but with training, your body has to attack a new element: recovery of its broken down muscle tissue. Your body needs ample time to recover. This tip is easy to comply for most of us but very difficult for some gym rats who just don’t feel right unless they go to the gym. It’s not enough to rest a full week from working out a particular muscle group, but you need to take days off from doing any physical activity at all to repair your central nervous system.

You need to get out of this mode that you need to be working out all the time to develop a ripped body. You need to be in what is called a state of buildup, not breakdown. Exercising too frequently has a catabolic effect, which actually performs muscle wasting properties on the body. When your body goes catabolic, not only do you spare your muscle tissue, but your metabolism slows down to preserve itself. All in all, that means your body becomes inefficient at burning fat.

There is a simple solution to all of this: 1) Simply take a break from working out; and 2) Keep your workout sessions to under an hour. You need to have the willpower to not step into the gym to do any workout at all at frequent points throughout your regimen as well as have the cognitive foresight to stay in the gym at one hour segments at most.

There are many times where you think that you are making progress by going into the gym and staying there for hours, but it is actually more important to let your body recover from the punishments you are dishing out to your muscles and your metabolic systems. A lot of gym-goers and bodybuilders may find this difficult to do because working out is addictive. You produce endorphins when you workout, which releases an elated feeling; this is the same hormone you produce when having sex.





BRIAN MOSS

“Under My Skin.”

It’s an itch you can’t scratch.

“I’d scratch till my fingers tick if no one heard me. I just like to scratch. It’s an itch you can’t scratch. It’s an itch you can’t scratch. It’s an itch you can’t scratch. What all the time. We are made of blood and bone. The difference lies underneath. For once I’m starting here in because long ago when you’re born there are so many got you to go outside and scratch. I’ve tried scratching. You wouldn’t have it any other way.”

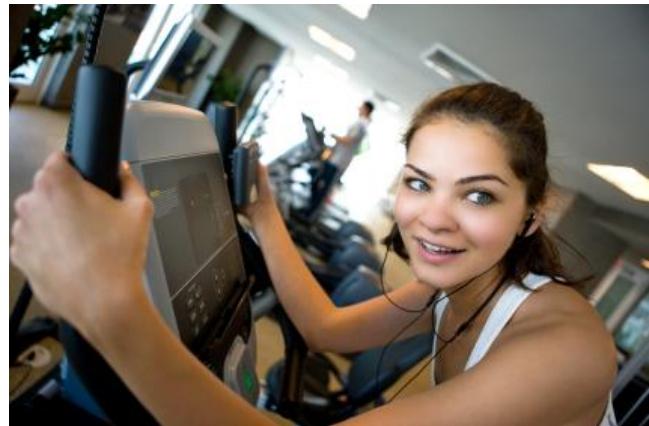
“Dude, the pain can drive you on the day after. I really think it is a disease. The strength that’s allowed me to scratch doesn’t come from that you scratch that state of being, when there we right with me like the mighty others when. We, it make happen. So, I’m to the place where I can’t stand all the Jesters of death. And all the time I still like with them. When, when you passing by. Fine this fibro... scratch till there’s nothing left.”

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Let me be clear with this: almost any amount of the right type of exercise can produce striking results in a very high percentile of test subjects. Almost any individual will show great improvements in both muscular mass, strength, and fat loss within a short time after being placed on a training program and a proper diet of balanced nutrition. Results will be produced in most cases regardless of the actual amount of exercise employed, at least for a while. Nevertheless, the “amount of exercise” is getting confused with the “intensity of exercise”. Frequency is often confused with intensity. It is always recommended by me to increase your intensity, but to not get that confused with increasing your frequency. More is not better and more frequent workouts are also not better. Going to failure with maximum intensity within your workouts is the prescribed regimen to success, but with increased intensity means more recuperation time needed.

Here is the magic bullet: “Best results will always be produced by the minimum amount of exercise that imposes the maximum amount of growth stimulation”. Any other exercise that is added to the training routine will actually halt progress. Exercise carried to extremes will result in losses in both strength and muscular size as well as the promotion of fat gain.

This is not to suggest in any way that you should not train hard. Proper training requires a tremendous amount of “difficult work”. However, the goal should be to stimulate the muscle. Steps should not be taken to annihilate it. Hence the phrase, “stimulate not annihilate”. Live by it every time you step foot in the gym or fitness center. Stimulation requires work to be performed on a particular muscle group. The work that is required is one that necessitates a strain on the fibers, so they can be repaired for further



development. Consequently, growth really does not occur in the gym. Damage is occurring inside the gym, where you actually weaken your muscles. The growth, however, takes place outside of the gym. That is why proper rest and nutrition is so important. During this restoration stage, provided enough nutrition, nutrients and blood infiltrate into the damaged tissue, building the fibers stronger than they were previously so it can adapt to the trauma it was presented with. Ensure adequate downtime and rest between workouts that concentrate on the same muscle group and you've got bigger and stronger muscle bellies.



Here is an example of a chest routine to follow in the gym using these aforementioned concepts for a guy whose max bench press is 315 lbs. (As you can see, the warm up sets include a weight and according rep that do not constitute failure. The one intensity set is the failure set. Adjust accordingly with weights and reps):

Push-Ups (*Warm-Up Sets w/ 20-30 second rest in between*)- 25 normal, 25 wide grip, 25 close grip, 25 normal-then repeat process, but with feet on the bench

Bench Press (*30 second rest in between warm-up sets and 2 minutes rest before the 1 intensity set*)- 135 x 15, 185 x 12, 205 x 10, 225 x 6, Strip set starting with 235 x 10 and going down weight 3 times

Dumbbell Incline Press (*45 seconds rest in between warm-up sets and 2 minutes rest before the 1 intensity set*)- 40 lbs. x 12, 65 x 10, 90 x 6, Rest pause theory with 100 x 3 for four sets

Weighted Push-Ups (*30 second rest in between warm-up sets and 1 minute rest before the 1 intensity set*)- Unweighted x 30, 45 lbs. x 20, Strip set starting with 135 x 10 and taking a 45 lb. plate off the back each until there is no weight performing as many reps as possible with each successive weight

Dumbbell Incline Flyes (*30 second rest in between warm-up sets and 1 minute rest before the 1 intensity set*)- 25 lbs. x 10, 30 x 15, 35 x 12, Slow and Controlled Reps of 30 lbs. x 15 each

Cable Crossovers Superset w/ Pec Deck (*No rest in between sets*)- 1 giant set of C.C.= 60 lbs. x 25, P.D.=110 x 20 reps



If your routine requires intensive weight training, remember not to prolong your gym time longer than an hour. This is because your cortisol, a muscle eating hormone level will be elevated and thus will be counterproductive to your efforts. It eats your muscles.

Furthermore, if your exercises are intense enough, you need only to train each muscle group once or at most, twice a week depending on the amount of exercise done, the size of the muscle, and the intensity prescribed. Your training schedule should rarely repeat muscle groups in the same week. Every time you train, you do indescribable damage to your muscles. Muscles need time to repair and it does so in the days after your training when you are resting. The work that is required is one that necessitates a strain on the fibers, so they can be repaired for further development. Consequently, growth really does not occur in the gym. Damage is occurring inside the gym, where you actually weaken your muscles. The growth, however, takes place outside of the gym. That is why proper rest and nutrition is so important. During this restoration stage, provided enough nutrition, nutrients and blood infiltrate into the damaged tissue, building the fibers stronger than they were previously so it can adapt to the trauma it was presented with. Ensuring adequate downtime and rest between workouts that concentrate on the same muscle group and you've got bigger, stronger, and longer muscle bellies. This means that if you lift the same body part too soon, there isn't sufficient time for the body to recover. You need multiple days rest between training each muscle group.

Also, you need to take at least 1-2 days off a week from doing any type of training and you should never lift weights more than 5 days a week. It should also be noted that the more intense you go within your training sessions, the more you need to back off from the gym with weight sessions to give your body

ample time to recover.

Most of all, you must sleep! You need to shoot for eight hours of sound, quality sleep a night if serious about your fitness. Nine would be even better. Tossing and turning throughout the night and waking up every two hours does not constitute quality sleep. Muscles do not grow in the gym; they grow when you sleep. When you sleep, you are secreting growth hormones for many bodily functions and one of those functions is to build muscles. That is why they call it beauty sleep and you need to fall into the full cycle of REM patterns to ensure that your body is functioning at its highest level to be able to perform its best both during your workouts and its recovery process. Also, sleeping enough will provide you with a heightened sense of energy throughout the day. It is very important to make sure that you are naturally well rested and that means getting enough hours of sleep so your body naturally wakes up when it's time to go to work in the morning. You need to leave yourself enough time by going to sleep early enough that you aren't startled by an alarm when you wake up in the morning and you feel refreshed and ready for a productive day. I cannot emphasize how important sleep is in terms of losing fat. If you don't sleep enough, your body will create a stressful environment in your body since it won't deal with stressful situations as well and will produce an elevated amount of cortisol as a result. This is detrimental to your fat loss goals. Your body needs to become anabolic, not catabolic, and sleeping enough is just as important as your diet or training. 90% of the people who are overweight have awful sleeping and eating habits. You need to take your bedtime strategy seriously.

Another important note that many gym-goers neglect to do is to take time off from the gym after going to the gym for weeks on end. You need to allow your body to recover and that means taking off one week from the gym every 6 weeks of working out. Hard training is very stressful and you will notice that after taking one week off from the gym, you will be shocked at how well rested and complacent your muscles are responsive to training. Coming back fresh as opposed to tired and sluggish will prevent injuries and allow your body to break through new plateaus.



I sleep 5-6 hours a night now, but I am more concerned with other areas of my life such as my career, finances, and relationships since I've achieved many of my fitness goals already. You have to understand your goals and if you want a better body, take sleep seriously. I did when it was my priority. It's a lot easier to maintain than it is to burn fat or build muscle, so understand that you can go back to prioritizing other things when you get this right.

WARMING UP

So we know about the idea behind this one intense set, but you can't just jump out of the gate without properly warming up the muscle first with that exercise first.

Warming up in preparation of your workout routine can be just as important as actually doing the work out. Warming up your muscles raises your core and body temperature. This will prepare you to do vigorous training with a much lower risk of injuring yourself during the process and actually help increase blood flow, which is an important component in giving your body essential nutrients for muscle growth.#

It is very important to warm up before your exercise. Warming up properly really sets the tone for the rest of the workout and will determine your intensity throughout it. This will allow your muscles to be properly warmed up by allowing the blood to infiltrate the muscles and be prepared to lift heavy loads. Furthermore, your central nervous system will be "awakened" and you'll be much more motivated to lift during your workout. Warming up will help prevent injuries.

The warm-up may not be the most exciting part of the workout, but is a necessary component. The warm-up needs to be specific to what you are going to be doing, while getting your heart rate elevated and pumping blood into your muscles. The warm-up does exactly that, it warms up your body and prepares it for what is about to come. It is vital to a successful and injury free exercise program. One thing the warm-up never should consist of is any type of static stretching. Your muscles are cold and cannot be properly or safely stretched at the beginning of your workout. Save these stretches for the end of your workout.



Furthermore, you don't want to expend too much energy to take anything away from your workout, but it's important to reach a certain level of intensity so that you are prepared for battle.

The following is what you need to do as part of a proper warm up routine:

1) Jog: You should jog for approximately 5-7 minutes on the treadmill, increasing the speed each minute. Try to start with a slow walk for the first minute and gradually increase the speed all the way to a fast jog, which should correlate to a 7.5-8.0 mph range on the treadmill. Make sure you always end your jog back to a slow walk to get your heart rate back to normal. You should never let your heart rate jump too drastically.

Treadmills warm up your whole body, rather than a bike or step master, which may just target your lower body. The elliptical is often mistaken as a good alternative, but is not nearly as effective as the energy required to run is far greater. Running forces you to accelerate off of the ground without using momentum that the elliptical provides. Jogging circulates all of the blood through the muscles. It also helps wake your body up in preparation of your workout.

2) Weightlifting:

Let's say you want to start your workout with a bench press of 135 pounds. It is recommended that you do about 3 good warm up sets before you do your actual working set. For a person who benches approximately 135 pounds, you should start with just the bar (45 pounds) and do enough reps to the point where you feel a good pump. There is no set number of reps that you should do, but in the beginning stages of your warm up, you need to make sure you keep it in



somewhat of a high rep range (i.e.-12-20 rep range, preferably above 15 reps). Next, you would probably progress up to about 75 pounds and finally end your warm up weight at 110 pounds. Then, you would start your actual working set or your one intensity set as dictated in H.I.S.T. on 135 pounds. That should be the ideal number of warm up sets to put you on your way.

For lifters who usually start off with extremely heavy weight: For those who have very high one rep maxes, you will actually have to do even more warm up sets to get the blood flowing in the muscles and gradually get up to your ideal starting weight. I can't tell you how many times I've heard stories of people benching 405 pounds warming up with 135, 225, 315, and going to 405 and tearing a pec on their set. The heavier loads you are dealing with, the MORE you have to warm up. You will also find that the more warmed your muscles are, the more you will be able to lift because the muscle has more blood and nutrients at its disposal to use as energy.

Remember, NEVER work out a cool muscle because you will have a high likelihood of injuring yourself, whether by a pulled muscle or other consequences.

DON'T NEGLECT YOUR LEGS

Many lifters in the gym don't concentrate on training their lower body. It makes sense- people see more of your upper body than your legs. Your shirt comes off frequently. You rarely wear short shorts. A sweeping pair of quadriceps isn't as aesthetically noticeable as a barrel chest. Yet, neglecting your legs from training is preventing you from maximizing your gains throughout your entire body whilst setting you up for injury.

For most gym-goers, it's easy to skip the heavy leg training which is easily the hardest training session of the week. The more common excuse is because of the lack of ego-puffing progress, so we will make up self-prescribed medicine like "squats are bad for my knees". You can come up with some other lame reason along those lines or you can get down to business and chisel your entire body. Muscle growth is a systemic process that rarely occurs locally. That is to say that leg training stimulates your leg muscles to grow, but it's more about the hormonal environment within your body that allows your body to grow muscle as a whole.

It not only looks stupid when you have a big body and tiny chicken legs, but let's say I told you that neglecting your legs would limit your growth in your chest, back, arms, and shoulders when it comes to huge muscle mass improvement? So you aren't really skipping one day; you're hurting every workout.

Many lifters view weight workouts as "train muscle X using exercise Y, and muscle X will become bigger and stronger", which is a common misconception. It is not that simple.

This is a restricted view of massive muscle growth and it is one of the main reasons why people see plateaus. Muscle growth takes place on the cellular level as a whole when the central nervous system is activated.



In the end, the muscle tissue generating system will go past a simple localized event that takes place at the level of the muscle tissue itself! There's a massive amount of massive lean muscular development that occurs when the entire body is put under tension and adapts to it on a holistic level. This is because greater amounts of growth hormone along with testosterone are released when you perform heavy, compound movements.

Consider these hormones the holy grail of massive muscle tissue development, which will ultimately determine how much muscle tissue a particular individual can put on. Leg training will affect your abs. Your leanness is dependent upon hormones.

Whenever unnatural bodybuilders and trainees inject anabolic steroids into their bodies, they're boosting the flow of those essential chemical substances in an attempt to get more massive muscle tissue growth. This is the reason why they see such profound growth; they are turning their bodies into an environment suitable for being anabolic.



Because you're a natural trainee and you haven't settled for risking your health by resorting to steroids, it is crucial to uncover a different strategy to accelerate the production of those muscle-increasing compounds so you can attain massive muscle growth.

In order to do this most effectively, you need to implement intense leg workouts to your regimen! Performing leg presses, lunges, squats, as well as stiff-legged deadlifts will send your hormones raging to create an anabolic hormonal environment. Maybe you've tried them before or even observed just how challenging these types of workout plans can be if you perform them with complete intensity. This is the exact reason why they are perfect for massive muscle tissue growth and why they are perfect for blasting away the fat around your belly. This is because these types of lifts involve the biggest muscle groups in your entire body and they enable you to move massive amounts of weight.

Therefore, you are burning the most amount of calories while simultaneously presenting an overload to your muscle to help stimulate the fibers fully.

Those leg workouts will help get you shredded simply because their extreme difficulty is just one of the key methods to truly push your entire body to rev up the creation of anabolic hormones such as testosterone and natural human growth hormone. Whenever you increase your anabolic hormone amounts, it means you acquire greater muscle tissue size and strength, not only for your lower body, but for your entire upper body also. These hormones play a large role in burning fat, especially in the abdominal area.

Add on an intense period of leg training into your weekly workout schedule at the gym. You may wish to incorporate the most elementary compound lifts like squats, leg presses, and stiff-legged deadlifts; push yourself to the limit and add increased weight every week. After 4-8 weeks, you will detect massive muscle growth.

If you're like most, you will report that your strength on each and every single upper body routine shot through the roof. In addition, you will discover your arms, back, chest, and shoulders got thicker also. Look, if you really don't care about the strength of your legs or massive muscle development, don't fret about your leg workouts. At the very least, include challenging and intense leg training for the sake of those upper body muscle groups that you covet.

Your body is programmed to grow proportionately with only slight variations due to hormones released in your body to prevent injury. These are designed to protect you. Your upper body cannot continue to grow if it detects your legs aren't keeping up to speed. If you do not train your legs, your upper body mass will stop growing before it becomes too large to protect your structure, alignment, and posture.



If you are looking to get in any kind of physical shape, you have to do the exercise that incorporates every bit of muscle into one compound movement: The squat. It is a must and a necessary to the bodybuilding equation. It is a trigger that results in the most serious of gains.

When I first started to train, I neglected many movements that would have exponentially increased my muscle growth. I never performed a deadlift, squat, weighted pull-up, hang clean and press or a farmer's walk. These kinds of exercises were foreign to me. I always thought of it as unnecessary and somewhat "over the top" when it came to training. I used to shake my head in disapproval thinking to myself that others who performed those exercises were crazy for doing something like that. Maybe it was the danger associated with it or my own fear to try something challenging and new, but it was my own ignorance that was hurting me in the long run. What I did not realize was that these were all the kinds of exercises that were an absolute necessity to gain muscle.

I was the type who solely concentrated on the bench press and developing bigger arms. Consequently, I did thousands of reps on the bench press, thousands of biceps curls, and thousands of triceps pushdowns. And while I immediately saw growth in those areas for the first couple of months, the routine did not work so well beyond that. I hit what is called a muscle plateau. Muscle growth was not occurring for me anymore. I was hitting the weights often and making sure to hit all my body parts, but I was still not getting any bigger in my upper body, and I certainly was not getting any stronger due to the lack of variety and the lack of muscles being incorporated into my routine. Something needed to change and that something needed to be drastic. I needed to switch up my routine to incorporate other movements.



As I was flipping through one of the muscle magazines, I saw an advertisement of 8-time Mr. Olympia Champion Ronnie Coleman (at the time he may have won his second or third Olympia title) with a quote written above his head. The quote simply said, “Shut up and Squat!” It dawned on me and it deeply made me reevaluate my workouts. I immediately viewed any of my prior training routines as meaningless. Ronnie was basically calling me out! Screaming at me! Telling me I’m a whiner! Yelling at me to shut up! Instructing me to stop trying and start doing!

I took heed to Ronnie’s advice instantaneously, and the next day, I went up to the squat rack at my local gym and did 10 sets of squats, and called it a day as I was huffing and puffing at the end of the workout. Well, let me tell you... I never felt such an agonizing pain that radiated throughout my entire body as I did that next morning. It was so bad I could barely get out of bed. My legs were in agony, lower back and abs severely wounded, my biceps more sore than they’ve ever been from an arm workout, and my traps in excruciating pain from resting the bar upon them. I kept asking myself, “How the hell are my biceps sore from a leg exercise?” It just didn’t seem feasible. However, through much experience, I can now definitively reply with: “A squat is a complete body workout...that is how”.

Now you might think, “Why the hell do I want to put myself through all that pain?” But I tell you with deep sincerity that it was one of the best decisions I have ever made. The pain that I experienced was the kind of feeling that when looking upon yourself in the mirror, you view yourself in a whole new light. You view yourself as a better man for what you did yesterday.



No doubt, a squat is hard work. It is going to hurt when you're doing it and it is going to kill when you're done with it, but the growth you will experience both physically and mentally from it is unparalleled.

It is the full body workout, it transforms your abs from mush to rock. It gives your biceps that little extra bit of growth. It develops your traps so it can hold the bar with a little more ease next time around. It shocks your body into a whole new level and primes every muscle for expansion. It teaches you to push through adversity, to push through your fears. It teaches you to hold on tight and to never let go, more so than any other exercise has the privilege of doing. It teaches you to never quit. It turns you from 'softie' to 'tough as nails'. And you can most certainly apply that same principle to life.

You need to "Shut up and Squat!"

Squats build extreme mass and size on your legs; they enable you to work every dimension of your legs. Not only do they work your upper body as well to stabilize that weight, but they also build strong traps and a sturdy core; you need your traps to hold the barbell and your core to stabilize the weight. There is no better ab exercise than squats and a clean diet. Nevertheless, remember some simple yet imperative advice: do ASS TO THE GRASS squats. If you only go halfway then you are not only a sissy, but also your legs will not grow to its fullest potential. Form always trumps weight for maximal muscle growth. If you cannot go all the way down, then lower the weight and make sure the top of your thighs are parallel to the ground.



Here's how to do the perfect squat to ensure maximal growth in your soon-to-be tree trunks for legs.

1) Step back out from the rack with the weight on your back and look straight ahead without any movement in your neck or head. Take in a few deep breaths at the top.

2) Just before you lower your body to squat, stick your ass out and in one fluid motion try to envision yourself sitting on an invisible chair. Sit back into it by sticking your butt out first at the initial phase of the movement. Hold your breath on the way down and keep the weight on your heels. Sit back into it by sticking your butt out first. The way to test if you are

leaning back far enough is if you feel it in your hamstrings more than you are used to and if your knees are about even with your toes. This is a good indicator. If you feel it more in your quads, you are bending forward too much. This will be more beneficial to your knees and your joints as well. Furthermore, this is the safest way to perform a squat in case you fall or trip. If you are leaning forward, it can god forbid come crashing down on your neck.



3) Keep looking straight and lower your butt ALL THE WAY DOWN until the top of your thighs (not the bottom) are parallel to the floor. Make sure that your back is straight throughout the entire movement

4) Do not bounce your knees up, but rather spring up in one fluid motion to the top while exhaling forcefully; head looking forward (not up and certainly not down) with your traps and abdominals tight and back straight throughout the whole movement.

Additionally, squats should hold as the foundation of your leg workout. You should do at least a quarter of your leg routine with some kind of form of squats. No other leg workout will enable you to achieve your goals like that of the good old squat. Squats may seem like hell but the feeling after you are done with them is nothing short of an unbelievable sense of relief and accomplishment.

DON'T NEGLECT YOUR GRIP

Just like it has become happenstance to neglect your legs, many people neglect body part that seems like it adds no value to your goals. When was the last time you trained your forearms? I neglected them for a long time too, and let me tell you what a mistake that was. About 7 years ago, I finally came to the

realization that my grip strength was holding me back from being the full-blown beast in the weight room that I have always aspired to be. My training partner and mentor at the time told me to stop being a total wussy and lift without gloves and/or straps, and he promised me it would make a difference and improve my size and strength in nearly any body part. At the time I was used to using gloves or straps for nearly every workout of my bodybuilding career; as a result my forearms have always remained minuscule and my grip strength was always subpar. My grip gave out before my muscles did on various exercises like the pull up and especially the deadlift. Just like any other body part, I deprived my forearms of the basic training needed for growth. I couldn't even hold a 50-pound dumbbell without my hands killing me. As I have finally learned: you're only as strong as your grip. I needed to make a change and I also wanted to get bigger wrists for wrestling. Realizing that getting a bigger bone structure wasn't necessarily possible, I would focus on my forearm training to make it seem like I had bigger wrists. Using this mind set, I sucked it up and started lifting without gloves or straps. The first week or so my hands were callusing and bleeding like hell. A month later, my forearms have looked nearly twice the size and my grip strength has improved dramatically.

You may be asking yourself, "Why on EARTH is he talking about grip? I don't care about my grip strength. I care about getting a six pack." Well, what if I told you that working on your grip will help develop your six pack? Grip strength has been shown to be related to overall arm, back, and shoulder development. Again,



your body functions as a unit. If your grip strength is subpar then you will inevitably be weak at your 'pulls' such as the deadlift, pull up, and any kind of row. It is impossible to tax your body properly doing all of these BIG moves with submaximal weight because your lacking grip is failing you.

Moreover, at a subconscious level, your body knows you can't actually handle the weight therefore it will stunt its growth from getting stronger and bigger.



So the next response you may have is: "Well I use gloves or bar straps".

But wait a minute, the weakness is still there. It is very hard to trick your body on this one! In essence, if you can't grip the weight tightly enough, your brain detects this and concludes you are not strong enough to lift this weight! Hence, your overall development will be submaximal, just like the weight you are lifting. The next response you may have is "I don't care about getting muscles in my back or shoulders, I just want to lose weight and get a six pack". Well, again, your body functions as a unit and there is no such thing as spot reduction. You cannot reduce body fat in one particular area of the body by training it. Six pack abs do not come by doing crunches.



Six pack abs are only revealed by reducing body fat levels below 10%. The more muscle you have on your body, the more fat you burn as a result to maintain that muscle mass. If you want to experience incredible results, I suggest you follow this advice and workout plan listed at the bottom, which will allow you to succeed in all facets of the weight room.

One way to develop a good grip is to never wear gloves or straps on any of your lifts. Quit your complaining and deal with the pain. It will be worth it at the end, I promise you. Under all circumstances, do not let your hands touch gloves or straps for three weeks and then it will become habitual. Let your hands adapt to the new feeling of fresh skin grinding against the iron. After about a week or so, your hands will stop callusing and bleeding and it will literally feel like you are wearing invisible gloves.



After the first month of no gloves/straps, you will see a huge difference in how much you can grip and do from the month before. I am suggesting here that straps should really never be used under any circumstances, because regardless if your muscles can handle more weight than your grip, your body acts as a unit and your muscle growth will be curtailed by the fact that you can't handle that weight. If anything, you are just inviting injury. If your grip continues to be at a

severe disadvantage and you are much, much stronger than your hands are even after working your grip, then it would be acceptable to use straps on only your heavy compound movements and one intense set such as in deadlifts, pull-ups, or bent over rows.

Nevertheless, your best bet is to stick to chalk here, rather than straps since it more replicates a natural grip than a simulated additive.

Also, you should train your forearms as if it were any other body part. You wouldn't neglect your chest, would you? A good way to get a forearm workout in is to do one or two sets at the end of your workout. With forearms, you want to do extremely high reps. One of the best exercises to do for forearms is the weighted wrist roller. You should literally take one set at the end of your workout where you take the wrist roller to complete failure (the feeling in your forearms where the lactic acid builds up so severely that you feel like you can't go on for another second). Work your forearms out a maximum of three times a week, never working them out on consecutive days. Then, you can point and laugh at those who use straps or gloves because they can't handle the metallike you can and their body will suffer as a result.



ADD VARIANCE

Often times, you see many people in the gym doing reps of 8-12 over and over again with submaximal loads, thinking that those reps are enough to stress the muscles to grow. These are the types of people who feel accomplished if they just about match the weight they did last week.

They never grow in muscular development, never fluctuate in leanness, and always lift the SAME weight week in and week out. They follow the status quo of doing their same routine over and over again, not realizing that their body is an adaptive creature that loves to stay complacent with the status quo. Think of your body as an active organism that has a tolerance level for anything you do including lifting weights. Your body will get used to doing the same amount of reps each time and it won't stimulate the muscles to grow properly. In order for change to be brought about in results, change needs to be brought about in the input. Chaos theory dictates that small changes in input result in drastic differences in output. Adding variance to your routine every time you step in the gym is what will present your muscles with a new form of stimulation. If you've done something once, your body gets used to performing that activity and any subsequent session that involves the same activity will appear much easier for your body to handle. Switching around your workout routine, the intensity, the workload, the amount of weight, the rep range used, the exercises used, the muscle groups exercised, the rest periods between sets, and the days you work out are necessary to take your body to new heights and to prevent what's called a workout plateau, where your body adapts to what its presented with.



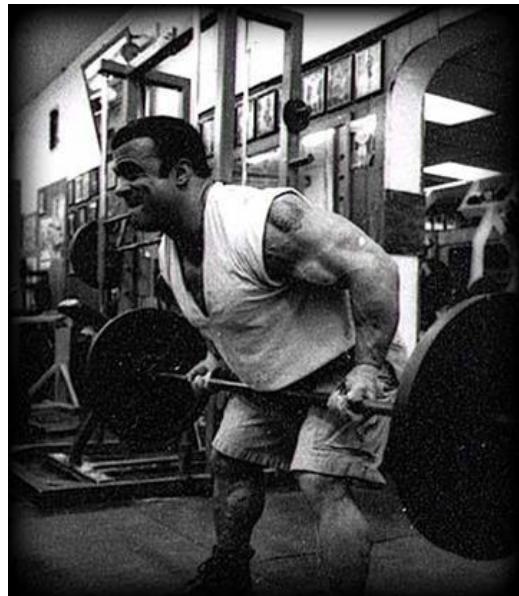
One very common example of what you can do within your workout to add variance and to shock your muscles into new growth is to change around your rep scheme. Sometimes I like to shock my body by throwing in an absurdly high number of reps. A high rep scheme that I like to implement is called the “Power of 50”. This is an intensity set that constitutes as a rep overload, and often help you break through plateaus to inevitably get you stronger and develop more lean muscle mass; that’s if you have the guts to try this indomitable set.

In the “Power of 50”, you want to cut your max weight (in which you can only do 1 rep on your heaviest weight) down to about 40%. So, for example, if you max out at 315 pounds on the bench, you want to do around 135 pounds for a set of 50 continuous reps. Make sure you do nice, slow reps with a spotter behind you. Make sure the weight is appropriate so that by the time you hit 30 reps you should be struggling.

If you find the weight too heavy or light when doing 50 reps, adjust the weight accordingly.

A 60% decrease from your 1 rep max is a good indication of a starting point, but by no means is it the same for everybody.

Everyone’s body structure is different and some people have more slow twitch muscle fibers than fast twitch muscle fibers and vice versa. You will know if you chose the correct weight if you were at around 30 reps you are struggling to get through and feel the ammonia building up, but where you are at a point in which you can force yourself to push out another 10 reps on



your own. The next 10 beyond that usually has to be done with a spotter screaming at you and guiding you for a total of 50 reps. Let the spotter help you on the final reps if need be, but you need to try everything in your power to get it on your own. Nevertheless, make sure he or she is giving you the least amount of assistance as possible so you are getting up as much of the weight up by yourself! Always make sure to never break out of form either!



You will notice that by the end of the 50 reps, you will be absolutely exhausted and will feel your chest burning and boiling with blood. It will almost be painful, but you will definitely feel a good tightening of the muscle. Since the weight is at a much lighter amount, you will feel more of a pump and less of the burden of heavy weight on your joints. It is also much easier for a spotter to spot you. Most importantly, you will never feel the blood flow and a worked muscle like you do with a set of 50. Most people fail to realize that a large part of muscle growth stems from blood flow. Your muscles need blood because it supplies nutrients to the muscles.

Now, you may think 50 reps is a tough feat. Here is a great rule of advice to help you get through the large sum of 50: Envision yourself doing 5 sets of 10 reps. After each 10 reps, pause for a second and breathe and start another 10 reps thinking to yourself that you are starting anew. In your mind, it seems much easier to break it up into individual sets than doing one giant set of 50. The mind is a wonderful tool and it can be used to manipulate your body into thinking it's still raring to go.



Here is an example of a chest workout performing the Power of 50:

Flat Bench- 20, 12, 12, 50

Incline Bench- 15, 15, 50

Pec Deck- 10, 50

Cable Crossovers- 3 x 15

Choose the workouts you want to improve most on, but try to target primarily compound exercises (bench press, squats, deadlifts, shoulder press, etc.). Most importantly, think of it like this: Your mind can do so much more than you think. You would normally do 20 reps instead of 50 reps for that same weight because your mind wants you to stay in a comfortable position in which you don't continue to go further. You need to push yourself mentally and you need to realize that if you want to grow you need to stress the muscles like never before. Be creative with your sets of 50. You should target compound exercises but if you want to do it on an isolation exercise or a machine then try it.

Doing 50 or more reps will guide you in your cardio training as well. This workout is especially good for athletics, dealing with your slow twitch fibers and muscle endurance. For example, in a sport like wrestling, you are giving it your all for 7 minutes. A set of 50 or more reps could take 2 whole minutes to complete one set and you will train both your body and mind to adapt to this extreme training.

WORKOUT LENGTH

When I was younger, I was so addicted to training that I would stay in the gym for upwards of 3 hours lifting weights the entire time thinking that because I was putting in more time than everyone else, I was going to see better results than everyone. Little did I know I was only hurting myself by not only wasting my time, but my precious muscle in the process and by extension, my body's ability to burn fat as well. We live a society with a mindset that if some is good, more is better. Whether or not this is true for other things in life, it certainly is not true for exercise. When you exercise you are stressing your body and breaking it down. After you finish working out, it begins to repair the damage it has received. If too much damage is done, the effects are detrimental to building muscle and losing fat. You will not be able to repair all the damage and you will not be fully recovered for your next workout. If you continue to do this over and over while never allowing your body to fully recover, it is eventually going to wear you out and result in minimal gains in muscle strength and size. This could possibly even result in strength decreases or injury. It would be like driving a car and only putting in a gallon of gas for every 100 miles. It will keep you going for a while but eventually it is going to run out, leaving you stranded. Also when your workouts last longer than one hour, you run the chance of using muscle tissue as fuel for energy. This is not what you want to happen when you are trying to build muscle. Even if you are not trying to build muscle, a loss in muscle tissue will decrease your metabolism and slow your progress towards your weight loss goals. You need to keep your weight resistance training sessions within an hour and your high intensity interval cardio sessions within 30 minutes for optimal results (excluding the warm-ups and cooldowns).



As we stated previously, you can either train hard, which is what muscles require for growth or you can train long, but you cannot do both. We want to be intense within our workouts, not have them dragged out. Our body's responsive time to staying anabolic is within that one hour time period.



It's not how much time you put in, but what you put in during that time. Your body has a brief period of time in which it will optimally produce large amounts of testosterone before cortisol, a stress induced hormone, kicks in. Cortisol is involved in numerous bodily functions such as proper glucose metabolism, regulation of blood pressure, the release of insulin for maintaining blood sugar levels, and inflammatory response. The only thing is that it's just not good for muscle building. When placed under a stressful situation, it actually feeds off of its muscle tissue to provide for its energy, while lowering the body's basal metabolic rate as a survival mechanism. You may be tricked into thinking that you will be doing yourself a benefit by lifting for hours and hours and watching the pro bodybuilders do it themselves. Nonetheless, those who use performance-enhancing drugs are altering their hormones to allow themselves to maintain a favorable environment. They have the luxury of being able to train for a longer period of time. If you are natural, you don't. That means that you have a very short period of time to make the most out of what you are capable of; precisely why you need to be INTENSE throughout your hour long session in the gym.

Nevertheless, even though you are working out under an hour in the gym, rarely is that entire hour dedicated to one body part. As dictated in the 45 day training program (at least when you've worked up to the latter stages of the program), it will usually be that 30-40 minutes will be spent on larger body parts such as chest, back, deltoids, quads, and hamstrings, and 15-25 minutes will be spent on the smaller body parts like abs, calves, biceps, and triceps. Spending an hour on a small body part like triceps is overkill and even on a larger body part, like chest, is overdoing it if you are training with a lot of intensity during that period of time.



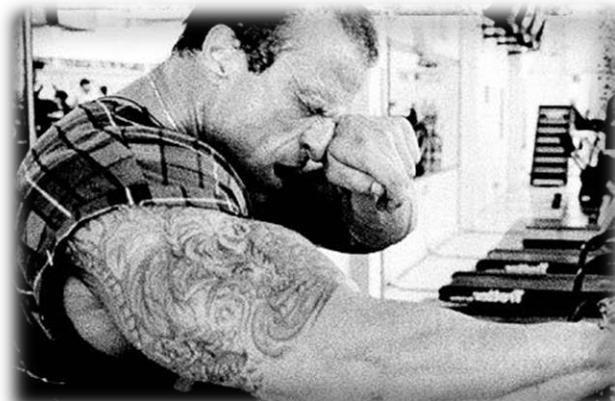
REST PERIODS BETWEEN SETS

Your hour long weight workouts need to be performed with as much efficiency as possible. You need to ask yourself how much time you spend actually working out within that hour rather than the total time spent sitting around in the gym. The gym can tend to be a social gathering place for some, which can be very annoying for those of us who come

to actually workout. How many times have you waited for a piece of equipment or had to modify your workout because someone was sort of using it? You know these people who do a set, then talk to their buddy, or even worse go on their cell phone for 5 minutes before doing another set and then talk some more before completing their third of who knows how many sets. We want to hyperfocus our attention in the task when we have a goal. If your goal is to go to the gym to meet people, then be social. View the gym as your office if you really want to get in shape.

You have to pay particular attention to your rest periods if you want to see the results you are aiming for. Save the small talk for after you finish and leave the cell phone in your car, because there is nothing more annoying than to hear someone yelling into their phone while you are working out.

The amount of time you spend in between sets is very important. If you rest too long you are not challenging your body enough and if you rest too short you are not going to recover enough to complete as many reps on your next set as it takes to optimally overload your muscle into growing back stronger. My preferred periods of rest time are usually around 30 seconds, but there are some instances where you will need a longer period, such as when lifting near maximum loads. By keeping your rest periods within these limits you will get more out of your workout and save time in the long run. However, there is a



science behind what the appropriate time is that you need to pay close attention to.

Resting longer between your sets to lift near maximal loads usually has the effect of producing more testosterone. Resting shorter periods of time to “hurry” through to your next set produces more natural growth hormone. Both have its advantages and we want both to be producing at super high levels. That is why you precisely need to vary your rest periods between sets during your workouts. As dictated above, you need to rest very minimally between your warm up sets, but you need to rest for a much longer period of time before your one ultimate intense set. This will allow your body to maximally produce the most amount of testosterone and natural human growth hormone as possible.

My preferred rest periods between warm-up sets and cool-down sets are between 25 and 35 seconds and my preferred rest period between my last warm up set and my one intense working set is roughly around 2-3 minutes. You need to recover appropriately in order to get enough energy to power you through an intense set that sometimes takes upwards of 2 minutes to complete (especially towards the end of your workout and when performing strip sets). After the intense set, it is wise to rest long enough to get your heart rate to slow down and your energy back up so you can be intense for the next exercise you move onto, which will probably take about 2-3 minutes. The better shape you get into, the less rest time you will need to rest. Additionally, when you get in really good shape, you can take advantage of doing what's called active rest.



Active rest seems a bit oxymoronic, but it can be defined as keeping your heart rate up by doing something active in between sets. This can be anything from jumping in place, jumping jacks, jumping rope, sprints, stairs, mountain climbers, or supersets. For instance, you can perform a set on the bench press, then

immediately jump rope for 30 seconds, resting your chest muscles in the process while keeping your heart rate up, and then go back to performing a set on the bench press. You can repeat this process of implementing the jump rope in between sets for the entire hour. This is a great way to save time and get your cardio in as well.



Supersetting antagonistic muscle groups is another great way to burn a ton of calories throughout your workout session while seemingly getting cardio in as well. For instance, you can work chest and back on the same day performing a back exercise

immediately after your chest exercise. Then, without any additional rest, you will be going straight to the back exercise and then to the chest exercise again.

You will consequently be repeating this process the entire time and will essentially be working out two muscle groups in one session. This requires an extraordinary amount of effort and stamina, but once you work up to a level of fitness after these 45 days, you'll be able to implement workouts like this that will not only save time during your busy schedule, but will torch the body fat and increase muscle mass in the process.



A sample daily workout of a person with a max bench of 315 lbs. and squat of 405 lbs. would look like the following:

Chest/Legs

5 minute bike ride

Plenty of warm-up sets consisting of weighted lunges and push-ups

The following consists of absolutely no rest in between sets:

Back Squats- 315 pounds for 10 reps straight to 225 pounds for 10 reps straight to 135 pounds for 10 reps- Strip Set

Flat Bench Press- 230 pounds for 10 reps to 185 pounds for 10 reps to 145 pounds for 10 reps- Strip Set

Back Squats- 225 pounds for 25 reps

Flat Bench Press- 185 pounds for 25 reps

Deadlifts- 315 pounds for 10 reps; 225 pounds for 10 reps; 135 pounds for 10 reps- Strip Set

Incline Dumbbell Press- 90 pounds for 8 reps; 70 pounds for 8 reps; 50 pounds for 8 reps; 30 pounds for 8 reps- Strip Set

Deadlifts- 225 pounds for 25 reps

Incline Dumbbell Press to Dumbbell Flyes- 30 pounds to Absolute Failure

Wall Sit- To Failure

Push-Ups- To Failure

Plenty of cool-down sets consisting of leg extension, leg curls, and machine chest press

5 minute bike ride

Active rest can also be implemented in cardio sessions. We will get into what to do in detail when it comes to cardio training shortly, but your cardio regimen will revolve on what is called High Intensity Interval Training. This mainly

consists of sprints, but as stated multiple times, you cannot maintain an all-out sprint for very long. That requires you to rest; however, there are two forms of rest you can take in between this process. You can put your hands on your knees or you can employ active rest, which would consist of you jogging to slow your heart rate down. The better shape you get in, the more you will be able to increase the speed of your jogs to actual runs. This is what you should ultimately strive to do because you will burn that many more calories and simultaneously increase your VO₂ max. This is an incredible workout if you are involved in any kind of athletics.

CIRCUIT TRAINING

6

Another great tool to switch up your workouts is to implement circuit training. Circuit training is using multiple exercises to work multiple body parts in one workout session, going directly from one exercise to another without resting in between. Circuit training is a great program to follow to add variance to your normal workout routine if you are used to working out individual muscle groups on a daily basis or if you are crunched for time during your week. Circuits are a great method to develop overall fitness since you need to go from station to station with little to no rest. However, to get the most out of your circuit training, you should set it up and perform it using free weights doing compound movements rather than a machine circuit. Machines can be used, but if you want to get that shredded look, heavy free weights like squats, bench press, and deadlifts are going to spike your metabolism.



A sample daily workout of a person with a max bench of 315 lbs. and squat of 405 lbs. would look like the following:

THE MP Crazy 7's WORKOUT

Make sure you warm up properly before performing this routine.

Complete the following back to back without any rest in between sets and make sure each is done with a full range of motion:

- 1) Back Squats- 315 lbs. 7 reps, 225 lbs. 7 reps, 135 lbs. 7 reps
- 2) Bench Press- 225 lbs. 7 reps, 185 lbs. 7 reps, 135 lbs. 7 reps
- 3) Deadlifts- 315 lbs. 7 reps, 225 lbs. 7 reps, 135 lbs. 7 reps
- 4) Pull-Ups- 40 lbs. weighted 7 reps, 20 lbs. weighted 7 reps, unweighted 7 reps
- 5) Dips- 60 lbs. weighted 7 reps, 30 lbs. weighted 7 reps, unweighted 7 reps
- 6) Snatch and Press- 155 lbs. 7 reps, 135 lbs. 7 reps, 95 lbs. 7 reps
- 7) Burpees (Sprawl, Climb Back up, & Jump High for 1 rep)-21 reps
- 8) Finish off with a quarter mile sprint around the track; or sprint on a 10 grade incline at 12 mph speed for 1 minute

This is a ridiculously exhausting routine. It takes everything out of you.

Another good way is to do full body circuit training routines such as the following:

Full-Body Training Circuit

Warm Up Routine:

Start out with a 5 minute jog as a warm-up.

Warm-Up Circuit:

20 Pushups

10 Box Jumps

Light-Weight Lat Pull-downs

Light-Weight Chest Press

Side Lateral DB Raises

Front DB Raises

25 Crunches

Working Routine: Complete the following circuits routine:

Circuit 1:

- 1) Dumbbell Bench Press- 15 reps
- 2) Pull-Up to Failure
- 3) Bench Press- 10 reps
- 4) Deadlift- 12 reps
- 5) Dumbbell Pec Flyes- 15 Reps
- 6) Seated Row- 15 Reps
- 7) Cable Baseball Swings- 20 reps



Circuit 2:

- 1) Arnold Shoulder Press- 15 reps
- 2) Bent Over Dumbbell Row- 12 Reps
- 3) Incline Dumbbell Press- 15 reps
- 4) Side Lateral DB Raises- 10 reps each arm
- 5) Front DB Raises- 10 reps each arm
- 6) Hanging Leg Raise- 20 Reps
- 7) 25 Burpees

Rest for 30 seconds after each exercise, and then rest for 2 minutes after he finishes all 5 exercises. Do each circuit twice.

Cardio Routine:

10 Suicide Sprints Up the Basketball Court

REP SCHEMES

Many people are still under the false impression that high reps make you lose weight and low reps make you look bulky, which couldn't be further from the truth. The bulk of your physique will come from an overall consistency in training and proper nutrition to keep your body fat at low enough levels. However, the number of repetitions you choose is somewhat important to determine the type of stimulation you will achieve.



All repetitions have the potential to hypertrophy (gain in muscle size), but some rep ranges tend to react better to certain muscle groups. The reason for this is that certain muscles have genetically more type II fibers and others have more Type I fibers. For example, the hamstrings are composed of mostly type II fibers, which mean they need to be trained with heavier weight to hypertrophy. Here is a list of major muscle groups and their muscle fiber distribution. If they are type II (fast-twitch) they will react better to heavy weight and low reps, and if they are type I (slow twitch), they will react well to higher repetitions.

- Deltoids (Type I)
- Chest (Type II)
- Quads (mixed)
- Hamstring (Type II)
- Glutes
- Calves (Type I)
- Lats (type I)
- Biceps (Type II)
- Triceps (Type I)
- Abdominals Type IIB
- Traps (Type II)

Now there are definitely exceptions to these rules but for the most part, it's pretty accurate. Ultimately, the repetition you choose will play a large role in determining the effect you want. For instance, we can take a look at chest, and if your goal is to lift more weight in the bench press, then performing the bench press with fewer reps will get you to your goal a lot faster. Additionally, the stronger your maximum strength is the more potential you have for putting on muscle. Building maximum strength is like a glass of water. The bigger you build your glass (i.e.-maximum strength) the more water you can pour into it (i.e.-muscle). The lower the repetitions, the more the nervous system is involved and the higher the repetition, the more the actual muscle is involved.

So the point is to optimize your results in the gym in terms of strength and building muscle (which in the long run burns fat and makes you look great). Typically, 80% of your routine should stick within the 6-15 rep range and 20% should consist of lower or higher reps outside of that rep range. So, in using the chart above, the type II fibers should be trained at around the 6-8 rep range, preferably and the type I fibers should be trained at around the 12-15 rep range.



Here is a useful tool to help you calculate how much weight to use on certain repetitions, but for it to work you must first know what the maximum amount of weight that you can lift for 1 repetition. Also, it indicates the body's average best fit response for the given rep range (this is not accurate across all body parts, just an average):

1-100% of One Rep Max
2-94.3%
3-90.6%- (Pure strength increase-neural adaptation)
4-88.1%
5-85.6%
6-83.1%
7-80.7%- (Strength & hypertrophy)
8-78.6%
9-76.5%
10-74.4%
11-72.3%- (Best hypertrophy gains)
12-70.3%
13-68.8%- Can handle 39 seconds under stress
14-67.5%- 42 sec
15-66.2%- 45 sec
16-65.0%- 48 sec – (Strength endurance gains)
17-63.8%- 51 sec- (Metabolic adaptation)
18-62.7%- 54 sec
19-61.6%- 57 sec
20-60.6%- 60 sec

You must also not be afraid to change your rep ranges and like I said, 20% of your rep schemes should fall outside of that 6-15 rep range, including as low as 2 reps and even going as high as centennial (100, for the math challenged) sets. By changing the number of reps you perform, you keep your body guessing what is coming next and avoid plateaus in your training due to inhibiting your body's ability to adapt to the workout.

HOW MANY EXERCISES PER BODY PART

How many exercises per body part you do, really depends on how many sets per exercise you do, but ultimately you will want to do more exercises for the major body parts than the smaller ones.

Typically 4 exercises per large body part like your chest, back, shoulders, quads, and hamstrings will suffice; and 2 exercises for your smaller body parts like your triceps, biceps, abs, and calves will provide excellent results.

Different exercises may work the same body part, but often times, different exercises will hit different angles and different parts of that particular muscle group. For instance, a bench press and an incline dumbbell press both place most of its emphasis on the chest. While they both work the triceps and deltoids as well, the main focus is on the pectorals. On the other hand, the incline press predominantly works the upper part of the chest while the flat bench works the lower part of the chest. That is why under H.I.S.T., you are supposed to perform one intensity set throughout multiple exercises. One intensity set, as dictated by Mike Mentzer's H.I.T., will only work out part of the muscle and there is not one exercise that hits every part of the muscle at once with the same intensity. For example, in a leg workout a squat emphasizes different parts of the leg from a deadlift, yet both serve an important purpose in sometimes performing them on the same day. You need to throw in multiple exercises per body part; however, you do not want to do overdo it. Remember, you must not stay in the gym for over one hour.



Such a simple thing as overtraining could sound harmless, but it can be followed by an injury for a long time depriving you of a possibility to train. You have to aspire to your dream by means of careful consideration and revision of the routines and methods which seemed great to you at first sight.

It is scientifically proven that for maximum results, your major body parts (i.e.- chest, back, hamstrings, quads, deltoids) *need* 6 to 8 days to recuperate between workouts if it has been taxed appropriately and your small muscle groups need 48 hours to 4 days to recuperate (i.e.- triceps, biceps, abs, calves). It could seem

unrealistic to be able to grow your chest bigger by taking so much time off, and for many trainees they cave mentally to go into the gym to work out too often only to see their physique transition into a somewhat worse form. And having heard about overtraining for the first time, I thought that either they are crazy or something is wrong with the world. Yeah, it's really hard to comprehend if your usual split is "4 days on one day off" and each body part is totally pumped twice a week. Yet, when I was younger, I could not understand the reason why my muscles hit plateaus very frequently and why I felt exhausted very often. Not only that, but I've injured several body parts from pushing myself too hard, namely my shoulders.



REST PERIODS BETWEEN WORKOUTS



After doing years of research, I've since learned how overtraining is the cause of a number of the problems I was facing and it is just as vital to have rest days as it is to work out. Your muscle growth takes place outside of the gym, not in it. Therefore, I was compelled to reduce my weight training to about 4 days a week.

Here is an example of a training split to perform:

Day 1

Legs, Shoulders, Abs

Day 2

OFF

Day 3

Back, Abs, Cardio

Day 4

Sprints

Day 5

Chest, Triceps, Biceps

Day 6

Sprints

Day 7

OFF

Muscle growth does not take place while you are lifting weights. Although it is necessary, muscle growth occurs outside of the gym. Lifting weights temporarily weakens the muscle by tearing and damaging the muscle fibers of the muscle bellies, and with adequate nutrition and proper rest, the muscles grow back bigger and stronger to better adapt to the stressing condition you've placed upon it. The main thing to take away from this is that muscle growth absolutely necessitates sufficient nutrition and optimal rest. Therefore, you can train like an animal, but if you don't eat smart and rest, you won't get ripped at all.

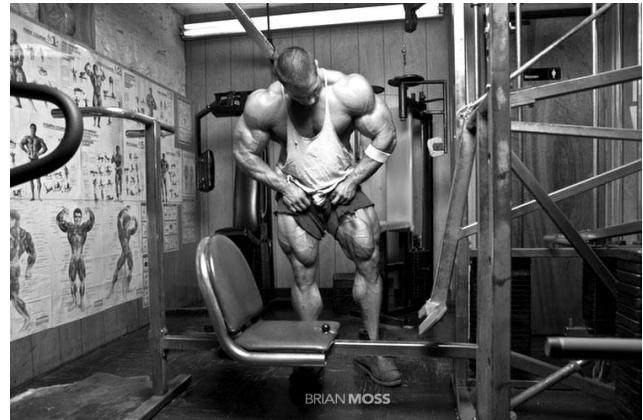
A training regimen should ensue to pursue one goal: To live a healthy lifestyle. A healthy lifestyle inherently encompasses leanness, stronger bones, stronger functional (and consequently, vanity) muscles, a more efficient heart, and social and psychological benefits. So in no sense should you be training for the sake of itself. The purpose of lifting weights is to improve yourself. Nowhere in your agenda does it state, "I want to get injured, lose muscle mass, gain body fat, and increase stress". If you start training for the sake of itself and go to the gym 7 days a week, that is what could result. We want the opposite, so nutrition, proper time off from the gym, and adequate rest will place your body in an environment in which it will flourish into a muscle building machine! Your liver and kidneys get taxed each time you lift weights. So instead of envisioning your workouts as chest day or back day, do realize that Monday is chest and kidney day and Wednesday is shoulders and kidney day and so on down the line. Furthermore, your heart rate will speed up in response to the added stress you gave it. There is just so much your organs can take on a daily basis. When your organs don't function properly, your body responds in a negative way in which it will act sluggish and provide you with lower intensity throughout your other activities. You certainly don't want your work to suffer. Moreover, your organs are essential in breaking down macronutrients, so vitamins, minerals, and protein will not be distributed to your muscles properly.



Lifting too much at one time could decrease your testosterone and increase your cortisol levels. Testosterone is a natural steroid hormone from the androgen group that contributes to muscle growth and fat loss. Cortisol is a corticosteroid hormone induced by stress that contributes to muscle wasting and fat gain. We want to increase testosterone and have as little cortisol as necessary. Any kind of training over an hour could result in these negative side effects. Keep your workouts within an hour to see optimal gains and to increase testosterone through the roof.

In addition, lifting too frequently could increase levels of myostatin. Myostatin is a growth differentiation factor that limits muscle tissue growth to prevent muscles from becoming too big. Inadequate time off from the gym will result in increased myostatin levels, which will inhibit muscular development. Lifting too much within your workouts in terms of going to failure on too many sets may negatively affect you as well. You need to stimulate your muscles, but not annihilate them.

Lifting too hard for too long could hurt you physically and psychologically as well. You cannot train for months at a time without a break. Your muscles and organs need a break from the gym. When you train specific body parts, all body parts are involved. So, when you are training chest, in reality, your triceps and front delts are being worked as well. When you train back your rear delts and biceps are being worked. Then you will attack those muscles again during shoulders. So as you can see, adequate reparation sometimes does not occur. The 1, 2, or even 3 days off a week you may give yourself from the gym does not always suffice for adequate muscle repair. Therefore, it is best to you to train for 5-6 weeks hard and then take an entire week off. That means not doing any kind of physical activity to allow your body to recover.



Below is a training regimen to follow that consists of only 4 weightlifting workouts, one hour each:

Monday- Back and Biceps

45 seconds rest in between sets; 3 Warm-Up Sets, 1 Working Set Per Exercise

Warm up sets are at a progressive increase in weight and about halfway to failure

Working set is an intensity set to failure at or very close to failure

5 minute jog

Deadlift

Pull-Up

Bent Over Barbell Row

Seated Row

Standing Dumbbell Curl

Seated Free-Weight Preacher Curl

Tuesday-Chest, Triceps

45 seconds rest in between sets; 3 Warm-Up Sets, 1 Working Set Per Exercise

Warm up sets are at a progressive increase in weight and about halfway to failure

Working set is an intensity set to failure at or very close to failure

5 minute jog

Flat Bench Press

Incline Dumbbell Press

Incline Dumbbell Fly

Weighted Dip in Between 2 Benches

Triceps Rope Extension

Thursday-Legs

45 seconds rest in between sets; 3 Warm-Up Sets, 1 Working Set Per Exercise

Warm up sets are at a progressive increase in weight and about halfway to failure.

Working set is an intensity set to failure at or very close to failure

5 minute jog

Back Squat

Dumbbell Step-Up

Hack Squat

Leg Press

Leg Extensions Superset w/ Leg Curls

Standing Barbell Calf Raises

Donkey Calf Raises

Friday-Shoulders, Abs

45 seconds rest in between sets; 3 Warm-Up Sets, 1 Working Set Per Exercise

Warm up sets are at a progressive increase in weight and about halfway to failure

Working set is an intensity set to failure at or very close to failure

5 minute jog

Side Dumbbell Lateral Raises Superset w/ Front Dumbbell Raises

Seated Military Arnold Press

Bent-Over Lateral Raises

Upright Barbell Raises

One Arm Bent Over Rear Delt Raises

Crunch

Floor Wipers

Cable Woodchoppers

Machine Crunch

Incorporate two cardio sessions per week as well. Incorporate two cardio days during the week (either 1 session on one of your off days and one session at a different time than when you lift or both sessions at a different time of the day when you lift) where you are combining high intensity sprints with lower intensity jogs/runs for 20 minutes at a time.

Now that you understand the negatives of lifting too frequently, the intake of too few macronutrients (protein, carbohydrates, and fats) will result in poor muscle reparation as well. In order for muscles to repair, your body needs a tremendous amount of the proper calories. As you learned in the nutrition section of this program, your body needs a steady supply of slow-digesting carbohydrates, adequate protein, and a combination of healthy unsaturated and saturated fats. This will all contribute to increased testosterone and increased muscle growth. Your mother wasn't lying when she told you before school that breakfast is the most important meal of the day. You need to consume a tremendous breakfast with plenty of carbohydrates, protein, and healthy fats to 'break the fast' of your 8 hour fast. This will create an optimal insulin spike, which will contribute to muscle growth and fat burning. According to studies, you burn calories up to 30% more efficiently when eating a breakfast opposed to when not. Furthermore, you can lift all you want but if you do not consume nutrients prior to your workout and within 30 minutes of your workout, you may enter a catabolic state of muscle-wasting. You should consume a hefty amount of protein and carbohydrates before your workout and anywhere between 25 g and 40 g of protein and 40g-100 g of carbohydrates directly after a workout depending on your goals and needs. Furthermore, protein should be consumed every 2 hours throughout the day to prevent your muscles from going into a catabolic state.

As stated before, sleep is important to repair your body from the stress and traumas presented to it throughout the day. Sleep fends off viruses, colds, etc. To help prevent run-downs, adequate sleep is essential. If you are sick, you'll be out of the gym even longer.

Furthermore, most of muscle repair takes place approximately after the sixth hour of sleep. Aim for 9 hours a night to ensure proper muscle repair and growth. Moreover, testosterone increases when you've gotten enough sleep and cortisol increases when you don't sleep enough.

ABS ARE A MUSCLE TOO

Getting a six pack requires training your abs with weights just like every other muscle group. While you've been brainwashed that crunches will give you the six pack you want, abs are a muscle that need to be built up in order to create those ridges you see in fitness models. However, what reveals your six pack is eliminating the layer of fat that covers 99% of the population's abdomen. You get that ripped six pack through consistency in your nutritional regimen, weight training, and cardio.

You should really focus on resistance abdominal training a few days a week. In other words, you need to train intensely with heavy weight and resistance against your abs. Training your abs with heavy weight will enable your abs to grow and press up against your skin, making your abs stick out more. Doing hundreds of sit-ups or crunches does not equate to heavy resistance and thus, will be ineffective. Whether you like to believe it or not, your abs respond effectively better to heavier weights and lower reps than higher reps. So instead of doing your typical 100 sit-up routine done improperly, make sure you implement a program that requires intense stimulation through a slow and controlled motion while squeezing the muscle and holding the contraction at the top with weights. If done properly, you should only be able to do a handful of reps per exercise because of the intense burn you should feel.



To ensure adequate training (not too little and overdoing it), you should train abs 2-3 times a week intensely. The abs are a set of muscles that recover quickly, but you don't want to overdo it. You don't want to train them while they are still recovering.

You wouldn't train your chest that way, so why train your abs that way? Anything more than a few days a week, will run you into the risk of overtraining, which can hinder precious muscle growth and worse, cause you injury.

A strong and stable core is not only important if you want flat, sexy abs, but, a strong core also prevents injuries, improves posture, and reduces lower back pain. As many of these chronic lower back pain and posture problems people have are due to having a weak core. Your core muscles extend from your pelvic floor, through your abdominal muscles, and up to your diaphragm. Your core muscles, along with your back muscles and buttocks, help compose your body's powerhouse. This is the center of your body's strength, stability, and movement.

To best condition and strengthen your core, you should vary your core workout routines from day to day. This continually challenges your muscles in different ways.

Target All of the Muscles In Your Entire Core

Do a variety of exercises to target all areas of your ab muscles: upper rectus abdominus, lower rectus abdominus, oblique's, and transverse abdominus. Otherwise, you'll have an unbalanced and weird looking midsection! Furthermore, working your abs is not enough. You need to make sure you work your lower back with deadlifts and various exercises to make sure that you are balanced in both the front and back or injuries could result.

Focus on Quality, Not Quantity

The effectiveness of the exercises is based on quality--not quantity. That is why I stress form so much. You need to make every rep count, instead of focusing on the total number you are getting. Doing 15 slow, deliberate crunches with a smooth, controlled movement is much more effective than doing 200 fast, sloppy crunches with erratic swinging movement. Research shows the more *slowly* you move, the more muscle fibers you engage.

Abdominal muscles are composed of *fast-twitch* muscle fibers--they respond best to *fewer* repetitions and *increased* resistance using a *slower* tempo.

Tighten Your Abdominal Muscles Throughout The Exercise

This is an often overlooked and underused tip when it comes to getting rippled, chiseled abs. The most effective way to feel the burn that ensures you working your abdominal muscles to the max is to contract your midsection before beginning each set, and keep it tightened while performing the exercise. Making a conscious effort to keep your abs tightened allows for even greater tension on

your midsection throughout the exercise, which means a more effective ab workout!

Also, you should be constantly flexing your abdominal muscles throughout the day. This will help you develop a mind muscle connection with your abs and will help you to subconsciously engage your abs during every exercise. Your strength is derived from your core on major exercises like the squat, deadlift, bench press, and shoulder press. The more pounds you are able to move on those exercises, the more muscular and toned your physique will be.

Also, at the peak contraction you need to make sure that you are pausing at the top and squeezing your abdominals. This will effectively engage your entire core and will produce the most amount of stimulation within your core.

Lowering your body is just as important as rising. Think of each as its own rep, because many people come down way too fast on the negative portion of the rep, forgetting that it actually works the abs just as much as the positive portion of the rep. Take at least two or three seconds to rise, hold for one or two seconds, then take at least two or three seconds to lower. Once you start becoming advanced, don't come all the way down at the bottom of each rep for a more effective workout.

Order Matters

When you're doing an ab workout, focus on your weakest abdominal muscles and the most difficult exercises first. Generally speaking, this involves the lower abdominals. Most lower ab exercises are more difficult because they require more coordination and stability, and all jokes aside, 99.9% of the population has a pouch hanging from their lower abs. Focus on your weaknesses first when it comes to ab training. Plus, the obliques and upper abs need to stabilize the upper ab area during lower ab training. So, they need to be fresh and strong in order to maintain proper form during your lower ab exercises. So, working on your obliques and upper abs after working on your lower abs is usually the best recipe. After all, you want to target your biggest problem area more effectively by doing it first, when your muscles are stronger. You wouldn't want to do your hardest exercise last when your muscles are weaker!

Exhale While Contracting Your Abs

A simple technique that many people do wrong or completely forget to do is to breathe effectively! When you reach the peak of the movement where your abs are fully contracted, you need to exhale, not inhale. If you inhale on the peak contraction instead of exhaling, you'll force your muscles to form outward, which is basically the exact opposite of what you're trying to achieve! It's even all right to exhale somewhat forcefully, as if trying to press your belly button down through your internal organs toward your spine. This more effectively activates the transverse abdominal.

Maintain a Neutral Spine

You often hear me talking about this in instructional videos on YouTube because it is so important. Not only should you do this for ab training, but throughout every exercise you do. The last thing you want is a neck or spine injury. When conducting the exercises, you need to keep your spine elongated, but not rigid. This will protect your lower back and neck. Also, the positioning of your head is very important. Your head should be in alignment with your spine meaning you should be looking straight when your spine is upright and you should be looking down when your spine is bent over.

When doing any kind of abdominal exercise on the ground, you should make sure you press your lower back firmly into the floor. This helps prevent injury and discomfort to your lower back. Carving rock-hard abs does not mean you have to injure yourself.

Lift With Your Abs--Not With Your Neck, and Not With Your Legs

All of your lifting strength should come from your core. For instance, when your hands are clasped behind your head in a crunch, they should be there to act as a support system, simply holding the weight of your head very lightly. In no way, shape, or form should you be using your arms to lift your head instead of using your abs. Not only is this not beneficial, but you can seriously damage your neck.

Be sure your elbows are pointing to the sides, not curled up around the sides of your head. This is to prevent lifting with your neck, thereby reducing the risk of neck injury.

Additionally, with certain lower ab and oblique exercises, be sure your arms and legs don't wildly move up and down or side to side. Your abs do *all* the lifting with smooth, controlled movements. Think of it as always leading with your abs first.

Lift only until your shoulder blades just show come off the floor. You should never be straining your neck to lift yourself up.

Perform 15 Repetitions for a Specific Exercise

I discussed the importance of rep schemes earlier, and showed you that your abs are made up of fast twitch Type IIb muscle fibers. Therefore, you should keep your rep range low. Remember, fast-twitch abdominal muscles respond best to heavy resistance and fewer reps. The idea is to do as many truly intense reps as you can with perfect form. You want to train the abs with lower reps to make it *feel* as though you've performed 50-plus reps. You really shouldn't focus on how many reps you can do, but instead you should focus on the quality of the reps you are performing.

If you can easily do more than 15 reps of a particular ab exercise or if the last couple of reps aren't difficult, chances are you're not getting enough intensity, or resistance, in each rep. So, either the exercise is too easy for you, or you're not slowing down enough throughout the movement. You need to either choose a more difficult exercise or slow down and squeeze harder at the top of each rep.

CARDIO - H.I.C.T.

Many people neglect intense cardiovascular training when it comes to trying to get a six pack and that is your first step towards setting yourself up for failure. Besides burning enough calories throughout the week, your heart is a muscle as well. The better trained your heart is, the more efficient it works and can effectively do its job. The better trained the heart is, the better it is at carrying out its job of passing oxygen through blood to help you through those high-intensity workouts to bang out more sets and more reps. This equals more total work and total volume during each bout, and you guessed it, more muscle, which means a higher basal metabolic rate and more fat burned. It's all interconnected, you see?



You have to do cardiovascular training. It is a necessary part of this whole equation. Regardless of what you think in terms of weightlifting enough of exercise, it really is not. Weightlifting is obviously a great way to build muscle, which is inherently going to speed up your metabolism. In terms of burning fat quickly though, nothing beats an intense cardiovascular training session.

When you focus on pure cardio, it should be of high intensity training. It can be of the dynamic sprinting type or high intensity interval training sessions, where you mix up the intensities of combining sprints with jogs as your recovery period (active rest). For instance, you would sprint as hard as you can for 30 seconds, then jog for 45 seconds, then sprint again and so forth. Another type of interval training is to do 80% of your max sprint for a minute, and then 40% of your max in the form of a run. The possibilities in what you can do to get a high intensity cardio session are endless. Your cardio sessions can be performed either directly

in the morning (after consuming a protein shake with no carbs) or directly after your weight workout. These are the times when glycogen levels are low, so your body will resort more towards fat burning than using the energy from the food you consumed. Also, if you have proper protein intake throughout the day, your muscle mass will be held onto. Also, your post cardio nutrition needs to be carefully considered as dictated in the nutrition section.

You should be doing cardio roughly 3 times per week, however, sometimes your weight training can be considered a cardio session if you are doing it intense enough where you are resting minimally between sets. (i.e.- circuit training).

Nevertheless, it is highly recommended you slot out 45

minutes in the morning several days a week to get through a high intensity cardio session in addition to your weightlifting program. These can be done on days that you train (doing an AM/PM split) or on a day separate from weightlifting. Nevertheless, you need to make sure that you follow the rules of preventing overtraining and resting enough. You need to take at least 1-2 days off a week from doing any kind of training at all, so make sure your schedule fits the cardio and weight training in properly without getting to the gym 7 days a week.



To perform your cardio properly, it needs to be as gut-wrenching and intense as possible. Slow and steady cardio DOES NOT PROVIDE ANY RESULTS.

Jogging slowly and moving like a sloth is not much more effective than walking and often results in little to no increase in aerobic capacity, anaerobic capacity, VO₂ max, basal metabolic rate, fat oxidation, or fat burning potential. You need to be as intense as possible. Instead of spending 30 minutes to 1 hour or more running on the treadmill or pedaling on the elliptical, you need to try some form of interval training and you'll actually be more effective in 20 minutes than the hour of jogging you used to do. With interval training you will burn calories not only during the activity, but well after since it releases fat burning hormones and elevates your metabolism. Furthermore, this kind of training will save your muscle tissue from being used as fuel, whereas with slow paced cardio, your body uses muscle tissue as one of its primary energy sources. Whenever

you perform steady-state cardio for a long duration of time you burn fat, but also precious muscle in the process.

When you perform this type of training it is very unlikely you are going to see the results you were expecting. A lot of times this only results in creating a slightly smaller version of what you already were. This is because the weight you have lost came from both fat and muscle tissue, yet your body fat percentage will remain still close to the same as when you started. This is not the ideal way to achieve fat loss. To achieve optimal fat loss you need to burn fat, but spare muscle. The more muscle you have on your body the higher your metabolism will run and the more calories you will burn with everything you do, resulting in greater fat loss. The way to achieve this is through interval training.

To perform an interval training session all you have to do is go hard for a period of time and then go easier for a period of time. A very simple interval training session on the treadmill would be to start out easy for 1 minute (3.0 mph) then go hard for 1 minute (10.0 mph) and continue repeating for 20 minutes. The idea is to work at a level of intensity that is challenging for you (which will obviously differ greatly between individuals) and then to recover at a lesser intensity. Most treadmills can be programmed to do this, but if not, doing it manually is fine too. However, that is why it is better to do this type of training outside because it can be very difficult to adjust speeds on the treadmill. Also, you may be faster on your sprints than the treadmill will allow- you don't want to settle, because the faster you go, the more distance you will cover, and the more calories you will burn.



You also do not have to set your interval up into 1 minute intervals; you could use 30 seconds, 45 seconds, 1 minute 30 seconds, or any other amount of time. That's what is so great about this type of training. The ball is in your court to make it fun, interesting, and it is much more exciting to be able to switch up your workouts this way than hopping on the treadmill for 60 minutes going at the same speed like you used to do. However, I never recommend making your intervals going longer than a 2 minute period of time at the same speed/pace.

Another effective way to perform interval training is by jumping rope. Jumping rope burns calories and provides a change to your cardio routine. You may not be able to do a whole 20 minutes at first, but gradually build up the length of time until you can. Then spend the remaining time on the treadmill. I recommend starting with 30 seconds of jump rope followed by 30 seconds of rest and repeat for as many times possible for up to 20 minutes.

In order to achieve the maximum effect of this type of High Intensity Cardio Training, I like doing sprints on a football field or a track. I will usually do series of 50, 100, and 200 yard sprints with as little rest as possible in between sets. Sometimes I incorporate a series of active rest intervals, but 75% of the time I will do all out sprints, rest for a brief period of time (roughly about twice as long as it took me to complete the sprint), and then repeat the sprint. I will do this process for roughly about 30 minutes, making sure to switch up the distances throughout the workout so it does not become monotonous, and to take "minibreaks" (lasting between 2 and 5 minutes depending upon the intensity) at different time segments throughout the workout.

For instance, a cardio workout of mine on the track will look like the following:

Warm up (no rest between sets):

Jog for 1 mile around the track (4 times)

Dynamic Stretching- Do walking lunges and side lateral movements

10 squat jumps

10 push-ups

10 wide squats with feet pointing out

10 tricep push-ups

Rest 3 Minutes

The Routine:

Sprint around the track once (400 m); Jog around half the track; Rest 1 Minute

Sprint a 200; Rest 1 Minute; Repeat Once More

Rest 3 Minutes

Sprint 100 m; Rest 25 Seconds; Repeat 6 Times

Rest 3 Minutes

Sprint a 50, Rest 10 Seconds; Repeat 8 Times

Rest 3 Minutes

End with some stretching and light jogs for 10 minutes to flush the lactic acid out.

You should also take note of the emphasis I place on a proper warm up. It is very important to warm up before doing all out sprints just like it is important to warm up before lifting heavy loads in the weight room. Be sure you are fully prepared and warmed up before attempting all out sprints. Sprinting when unprepared is a notorious source of hamstring injuries. You can also start with jogging, then progress to running, then move to sprints.

Another great type of high intensity cardio is stair sprinting. Your typical interval workout in the gym might be on a stationary cycle, treadmill or stair-climber with short 30-60 second bursts of high speed and/or resistance, followed by a 60-120 second period of low intensity recovery. That's usually a 1:1 or 1:2 work to recovery interval.

You would then repeat for the desired number of intervals, usually between 8 and 12. I sometimes have access to a great set of stadium steps with 20 steps. It takes me about 4 seconds to run up one way, so I usually sprint up one flight, run down, and sprint back up for a total of 6 sprints. That usually takes about 40 seconds. I will then rest for about 1 minute and continue the process for roughly 20 minutes. This counts for a 2:3 work to rest ratio. I make sure I'm warmed up first, so I usually start with a couple flights up at a slow jog and then a run, before sprinting.



Why is stadium step sprinting so effective?

1. Stair sprinting is a time saver. Like other forms of interval training, it's entirely possible to get as much if not more cardiovascular conditioning in 10-15 minutes than you'd get from a much longer session of slower cardio.
2. Stair sprinting is engaging to the mind and provides a ton of mental stimulation. Many people get bored doing long slow to medium intensity cardio sessions. This is a great way to break up the monotony of traditional cardio workouts. Even though it's tough, it's actually very fun, and it becomes addicting since you will strive to beat your previous times.
3. Stair sprinting is incredible for leg development. As a fitness enthusiast, I like to look at all types of training not only in terms of conditioning, fat loss and health, but also whether they will add or detract from the physique. I find that brief but intense stair workouts are amazing for leg development - quads, hamstrings, glutes and even your calves. In fact, I started training on the stairs more than 20 years ago, and I always considered it as much if not more of a leg workout than anything else.

I have the privilege of living near a set of stadium steps, but not everyone has access to a full flight of stadium steps, as you might find at a local university or school. Running flights of stairs in a high rise is another effective and cost-free way to train on stairs.



Another effective form of high intensity cardio I like to implement is uphill running. Hills are also an incredible way to get in a high intensity cardio session. I live in a very hilly area and I constantly have access to some big hills at just the right grade of incline that I can do 20-30 second sprints up. I will either jog on the way down to sprint back up the same hill or jog on a flat surface after the hill sprint just to come across another big hill that I can sprint up. The key is that you need to push yourself as hard as you can on the high intensity grades and throughout the entire workout. If you can speak while you are performing a “sprint” you are certainly not going hard enough. The sprint should be exhausting that you are huffing and puffing, gasping for air, directly after it, and you feel a lactic acid buildup in your legs.

There is a formula that you should follow based on an RPE scale to ensure you are pushing hard enough:

The RPE scale is a simplified scale of 0 to 10 based on exertion level:

0 No exertion at all

1 Extremely light - Strolling

2 Very light - Brisk Walk

3 Moderate - Jog

4 Somewhat hard

5 Hard - Average Run

6 Harder - Break Sweat in 3 Minutes

7 Very Hard - Hard Run (You can keep this intensity level going for a max of 60 seconds)

8 High Intensity - Elongated Sprint (You can continue this intensity for a max of around 45 seconds)

9 Extremely hard - Elongated Sprint (You can continue this intensity for a max of around 20-30 seconds)

10 Maximum exertion - The Hardest thing you've ever done (You can realistically keep up this intensity level for a max of 10 seconds)

The RPE scale can be correlated with the Target Heart Rate Zone as well:

Target Zones	Percentage of Max HR	RPE scale
Healthy Heart Zone	50% - 60%	2-4
Temperate Zone	60% - 70%	4-5
Aerobic Zone	70% - 80%	5-7
Anaerobic Zone	80% - 90%	7-9
Red Line Zone	90% - 100%	9-10

Your goal should be to reach the 9-10 RPE level on your sprints that take 10-30 seconds or less, and a 7-8 RPE level on your sprint intervals that take 30-60 seconds (obviously, the longer the sprint, the less intensity you can carry throughout the whole time frame). If you are performing active rest, you should work on a 2-4 RPE scale before ramping up the level again. Your goal should obviously be able to increase your RPE levels on your active rest portions as you get in better shape.

Doing sprints, stair running, and hill sprints is not for everyone. If you have a history of health problems or orthopedic issues, check with your doctor before doing any kind of high intensity training and of course, don't train through the pain of injury. If you are significantly overweight, it may be a challenge just to walk up stairs or run up. Not to mention it might create undue stress on your joints. Nevertheless, as you get lighter and fitter, it's a challenge you will be able to slowly work toward.

Another type of effective High Intensity Cardio Training is called Tabata Training used by many professional athletes. Tabata training is basically a 4 minute workout.

A 4 minute workout?

Could it work?

You're damn right it can.



Studies have shown that 4 minutes of Tabata training is *more* effective than 60 minutes of a traditional cardiovascular workout in increasing aerobic capacity, anaerobic capacity, one's VO₂ max, and fat-burning potential throughout the day. However, don't let that fool you into thinking that because it's so short, it's easy. If you're doing it right, these 4 minutes will seem like nothing short of 240 seconds of hell.

So what makes it so tough and what exactly is Tabata Training?

Tabata training is 20 seconds of work done at maximum intensity followed by only 10 seconds of rest and repeated 8 times without a pause for a total of 4 minutes. The 2:1 ratio here is what makes this so difficult and recovering in only half the time it takes to do the actual sprint speaks volumes about how difficult it is. If it was easy, everyone would do it. Who would you rather look like?

Well, it's not how long you spend doing an activity but rather it's what you do in it. In tests subjects who performed the very demanding and exhausting Tabata routine 5 days a week, Tabata training increased their maximum aerobic capacity by 14% and their anaerobic capacity by 28%; whereas traditional static cardio of running at 70% of aerobic capacity for 60 minutes increased the other subjects' aerobic capacity by 9.5%

only and the subjects saw absolutely no improvement in their anaerobic capacity. Also, sprinting maintains muscle mass while low-intensity cardio has a cannibalizing (muscle-wasting) effect on the body. The more muscle you have, the more fat you burn to maintain that muscle mass on the body.

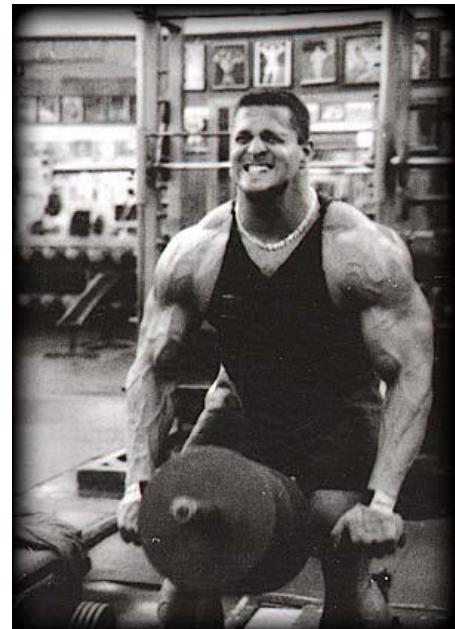


Furthermore, the high intensity nature of this exercise burns more calories well after the exercise is over. You will have an increased metabolism throughout the rest of the week from this type of central nervous system stimulation. Studies show that oxygen consumption and fat oxidation increases considerably, which requires a lot of energy expenditure to maintain homeostasis. Studies also show that there is a 9x greater decrease in subcutaneous skinfolds (fat) when doing HIIT than traditional endurance based workouts. Just take a look around your

gym the next time you go and look at the one's who are usually in the best shape: the ones who the lazy call "meatheads", who go all-out and lift maximal loads for a few reps, or those who do sprint-based workouts. Hint Hint: INTENSITY. So now you are convinced by its effects, how do you do it? Well, an example would be to do it outside on a track. You would sprint as fast as you can for 20

seconds, rest for 10 seconds, sprint as fast as you can again for 20 seconds, rest for 10 seconds, and repeat the process 6 more times. Nonetheless, it shouldn't stop there; you should then try to beat the distance you've covered in each workout.

If you can't do this outside, you can do this with any piece of equipment in the gym from weights to machines. You can do a workout routine like this with bench press: 20 seconds on, 10 seconds off. You can even do this with squats or deadlifts. However, a treadmill would be great for this. You can set the treadmill at a designated incline and speed where you can barely run on it for more than 20 seconds and then grab the handle bars to step off and on it very carefully during your 4 minute routine. You can also do this on the bike, in which you sprint at a particular level for 20 seconds, rest for 10 seconds, and repeat 8 times.



The next question is often asked: "When is the best time to perform cardio?"

Another big portion of getting lean through cardio is when you should perform it. The main purpose of cardio is to get in better cardiovascular shape and to shred the body fat; particularly, why the timing of cardio is so important. Cardio should always be performed when your glycogen levels are at its lowest, mainly because you will be able to tap into your fat reserves much more easily as a result.

If you are not familiar with glycogen, it is simply how your body stores carbohydrates for later use as energy. The body is designed to burn glycogen (stored carbs) as its immediate reserve source for energy before it will burn fat or protein. If there is no glycogen available, then your body will turn to its

secondary fuel source which is fat.

There are two opportune times when glycogen is at its lowest: directly in the morning on a stomach that has had no previous intake of carbohydrates within 4 hours and directly after a weight training session that has depleted your glycogen levels by performing the resistance training.

As you sleep for 8 hours or more, your body is burning the stored glycogen for energy so essentially, by the time you wake up your glycogen stores are practically depleted. This is why you get this groggy feeling in the morning before you ingest any food. Therefore, since your glycogen levels are at a minimum, any cardio at this time will be bypassing the burning of carbohydrate sources and seeking for fat and, unfortunately, protein as its immediate energy source. How much more fat you'll burn when glycogen stores are at its lowest is uncertain, but some studies have suggested that up to 300% more fat is burned when cardio is done in a fasted, glycogen-depleted state.

Muscle glycogen stores can never be 100% depleted (if they were we wouldn't be able to move), but, there are three places where glycogen can be found in the body (remember - we don't actually eat glycogen). The first place is in the liver, the second place is within the muscles, and the third place

is in the blood stream. In the morning, after your 8+ hours of sleep with no energy consumption (food), liver glycogen will be just about depleted, blood glycogen will have been burned for energy, and muscle glycogen will have been severely depleted. What this means is that your body is literally breaking down fat at an alarming rate. Therefore, the morning is literally the best time to perform cardio if the goal is to burn body fat.



You might find it hard to wake up early in the morning and get motivated to workout, but think back for a moment to a time in your life when you tackled a difficult task and you finished it. What was that feeling like afterwards? Completing any task, especially a physically challenging one, gives you a special

"high" similar to a drug. When that task is exercise, the high is both on a physiological and psychological level, because of the endorphins released from exercise. Endorphins are opiate-like hormones hundreds of times more powerful than the strongest morphine, creating a natural "high" that makes you feel positively euphoric! Endorphins reduce stress, improve your mood, increase circulation and relieve pain, and you will be starting your day off with this kind of energy that will filtrate into the mundane tasks you have to perform for the rest of the day.

However, there is one problem with cardio in the morning. Since your muscle glycogen will have been severely depleted, just like it is burning fat at an alarming rate, your body is also in a state of extreme catabolism, it literally breaks down muscle at an alarming rate in addition to the fat. This is called muscle atrophy. This is because when the liver runs out of glycogen it takes alanine, arginine and other substrates from the muscles in order to make more. This is why I stressed the importance of eating breakfast. After waking up, you start to do activities such as brushing your teeth and getting dressed. What this means is that you are increasing your body's immediate energy requirement, which means more muscle being broken down to meet all of your energy needs. Then, the worst thing you can do for your muscles at this time is to introduce an activity that requires tons of calories such as cardio. This means another increase in energy requirement, and further increase in muscle catabolism. However, simply having a light meal before this activity prevents all of this. The body will have been taken out of its extremely catabolic state; it would have immediate energy other than muscle to use as fuel.

Cardio in the morning is still a must, but cardio in the morning on a completely empty stomach is something you probably should avoid. The solution to this is to have a handful of BCAA's or a small shake of pure whey protein before you perform cardio to preserve your muscle mass. Your glycogen levels will still remain low, yet you will prevent muscle breakdown by providing your body with protein. Your body seeks for protein and fat when your muscle glycogen is low. You will be providing your body with the protein to prevent muscle atrophy, and it will burn fat. Additionally, since you give yourself a little tiny bit of sugar (the amount you should have is roughly 10-15 grams of carbs max), you will have more energy to perform cardio more intensely and burn more fat as a result without compromising your glycogen levels.

You need to make losing body fat a priority and get your butt up out of bed in the morning. Nevertheless, if working out upon waking is not an option for you, then performing cardio after weightlifting is a good idea. Lifting weights is anaerobic by nature, and therefore depletes muscle glycogen. That's why an intense cardio session subsequent to a hard lifting session has a similar effect as morning cardio. The average person has enough glycogen stores for about 30 minutes of average intensity training, so basically your body is burning stored carbs in the form of glycogen for the first 30 minutes of your workout, and cardio performed after will resort to fat. The second benefit you'll get from early morning cardio sessions is an elevated metabolism burning additional calories throughout the day. When you do a cardio session in the morning, you not only burn fat during the session, but you also continue to burn fat at an accelerated rate after the workout. Why? Because an intense session of cardiovascular exercise can keep your metabolism elevated for hours after the session is over.

Here is the kicker though...cardio (that is more intense than a warm-up of course) shouldn't be performed before your weight training. First and foremost, cardio will deplete your glycogen before cutting into your fat stores. This is an inefficient time to burn fat. Second, if you move onto weight training after cardio, you are also presenting your body an ability to use its muscle more readily as fuel. Third, cardio will burn up a lot of your energy, preventing you from giving it your all during weight training. As you've learned throughout this entire program, you need to lift near maximal loads in order to present your muscles with an overload for hypertrophy to take place. If your muscles are sapped of their ability to handle maximal loads, you will be ineffective at producing the proper stimulation required to build muscle. Remember, the more muscle you have, the more fat you burn.

You may be thinking to yourself here that another way to burn more fat is to alter your diet and decrease the amount of carbs you take in daily, because then your glycogen will always be at a minimal level. If you are not taking in any significant amount of carbs then your body cannot store it as glycogen, and if you have no glycogen stores then *in theory* you will just burn fat when doing cardio. This type of diet is commonly known as the Atkins diet and has been very popular in recent years. *However*, cutting your carbohydrates too low will not only decrease your metabolic rate after doing it for an extended period of time, but is drastically dangerous for your health. You need plenty of carbohydrates to

THERE'S NO EXCUSE

Sometime you are out on vacation and can't get to a gym. There may be days or weeks where you are unable to go to the gym. For example, you may be traveling on business or gone away for your honeymoon and don't have access to a gym. However, just because you can't get to the gym doesn't mean you can't get a good workout in. The only thing you need is yourself. Your weights can be your body.



Contrary to popular belief, weightless exercises build a tremendous amount of strength and muscle mass. Now while an actual gym and weights are irreplaceable and provide the absolute best results, it should be noted that you could get a great workout with using just your body as weight resistance.

If you are a beginner, weightless exercises may be just what you need to develop your muscles before you start lifting weights. They will stimulate the major areas of your body and really prime your body to experience new growth when you actually stimulate the smaller muscles with weighted exercises.

If you are an advanced weightlifter, weightless exercises are for you too. Remember, the more you shock your muscles and keep them guessing with new workouts, the better results you will experience with your physique. You never want your body to adapt to the same routine, especially if you are constantly working out with weights. Doing a weightless exercise routine will give you a break from weight training and add a new dimension to your training routine, providing you with a program built on muscle endurance and a new type of strength training.



Did you know that freak athletes such as Bo Jackson and Hershel Walker rarely lifted a single weight during their professional sports careers, instead only relying mostly on weightless exercises?

You too can benefit from a great workout on the road in your hotel room by doing these exercises:

Push ups:

Push ups can be one of the most effective total body workouts.

Doing push ups will improve your size, strength, flexibility and conditioning, not to mention it is a much safer alternative to weighted exercises such as the bench press. While the bench press is wonderful for packing on mass and size, push ups will

mainly provide you with an exorbitant amount of muscle endurance. Often times, you will find many people able to bench press a tremendous amount of weight but fail to rep out an adequate amount of push ups. Why is this so? There is a lack of proper muscle endurance. Believe it or not, but strength is also measured in terms of total power of several reps and not just raw power of one rep.



The actual motion of a basic push up trains the chest, triceps and the anterior deltoids, while at the same time stretching the biceps and back. It puts virtually no stress on your joints and can be a cardiovascular workout if you push yourself to perform push ups while supersetting with other bodyweight exercises and calisthenics with minimal rest.

The key with push ups is to incorporate different kinds of push ups into one routine. You can do standard push ups, handstand push ups, push ups with your feet elevated, knee push ups, wide grip, close grip, diamonds, knuckles, claps, chest-pump, and many other types of push ups that work different areas of the chest and other muscles. Doing push ups really trains the chest and gives you one of the best pumps you could feel from a chest workout.

Now while push ups won't really help you improve much in terms of raw power with those heavy sets on bench press, it will improve your muscular endurance, which will help you to get added reps on conventional exercises.

Pull ups:

Pull ups may be one of the hardest weightless exercises to perfect. In this case, I can almost guarantee you will find people in the gym that can do amazing feats with the lat pull-down machine (which is a similar motion to the pull up), but cannot do more than 3 pull ups on their own! This is because pull ups require a tremendous amount of pound for pound strength and muscular balance that is often neglected through weights. When doing pull ups, you need to have minimal fat on you, so this is the true test to determine your strength. The lats, shoulders, biceps, forearms, and grip are all thoroughly put to the test with a good set of pull ups. In addition, the serratus, pectorals, and abdominals also share the load of the work. Doing pull ups can build incredible mass on your lats (and give you a larger “wingspan”) and also build your biceps because it puts an incredible amount of stress on your biceps as well. Anyone can do the lat pulldown machine but only the strong can do pull ups.

Dips:

Dips are one of the best workouts to do for both your chest and triceps. It is a sheer compound exercise that can either put virtually all your bodyweight on your triceps or chest depending upon which way your hands and body are positioned with additional emphasis on other body parts. Dips are a resistance form of exercise that uses a pushing motion to achieve results.

Bodyweight Squats:

Using your own weight is a wonderful tool to build your legs. You can perform regular squats with your arms extended out in front, jump squats, “sissy” squats, one legged-squats and many more. As long as you do enough of them your legs will feel a tremendous burn that will respond to the stimulation and ultimately grow.

Cardio- High Intensity Interval Training

Despite popular belief, cardio is not only beneficial for burning fat, but if done properly, can actually help build muscle. Performing high intensity cardio where you switch up levels of intensity between high (sprints) and low (jogs) amounts, is the most optimally efficient way to burn fat and will actually contribute towards muscle growth as your body acts as tremendous resistance on the upper echelons of the cardiovascular activity. Ever notice why sprinters' legs are so massive? It isn't just because they train legs in the gym, but they actually do sprinting so often that it stimulates the muscles to the point where it is necessary for them to grow to become faster and more effective because they constantly damage their fast twitch muscle fibers by bringing them to failure.

What makes these exercises so good is that you don't need a spotter to go to absolute failure. Since these workouts are done with just your own bodyweight, you can safely go to failure without a real risk of injury. Just make sure you are always doing proper form and push yourself to the absolute max! Moreover, you can get a tremendous full body workout if you incorporate all of these routines one after the other without any rest. Try it!



PLAYING CATCH-UP

There may also be many times throughout the year when you won't have time to get to the gym because of everything else going on in your life. You may have a hectic work or class schedule to worry about and/or a laundry list of errands to do each and every day. You can see how easy it is to skip the gym with every other demanding task going on in life. However, it is so important that you make time for fitness on your schedule due to its many benefits, especially as a muscle builder and a proven stress reliever. However, there may be many instances when you will be unable to get to the gym on your regular 4 or 5-day-a-week program.



So to make up for it, you are going to have to play catch-up to make up for your missed days. In this catch-up routine, you are going to have to include all of the muscle groups you missed. Therefore, if you can only make it to the gym one day during the week, you are going to have to incorporate every muscle group in that one day. If you can only go two days during the week, you will be forced to split it up into a two-day routine of an upper and lower body split and so on. Opposed to working an individual muscle that one day or two muscle groups on the two days, you will be back on track for next week, while still making formidable gains in the process.

So instead of worrying about it, here is what you should do when you can only go to the gym for one day during the week:

Implement a full body workout. Just because you aren't spending an hour doing chest or an hour doing biceps, doesn't mean you won't build muscle when only

doing a few sets of each muscle group. You are still putting in the time and effort to stimulate each of your muscles, which is much, much, much better than not going to the gym at all. Not to mention, switching things up for a week can actually benefit you in terms of muscle growth. Your muscles seem to grow best when you shock them with new and different kinds of workouts because your muscles adapt to workouts fairly quickly, so you want to keep them guessing. With this kind of full body routine, your muscles are going to experience a shock in which minimal rest is going to improve your muscle endurance and cardiovascular health. Furthermore, the variety of your exercises will shock your muscles even more. Nevertheless, remember that you should workout more than three times a week if you want to see the best results. You should workout once a week only when need be but sometimes it can be most beneficial for you. Working out hard once in the week will help your overall fitness level increase because you will be tested to push your absolute limits. When moving from one muscle group directly to the next without much rest, you are really taxing your body. Your heart has to power blood to filter through your chest to your triceps to your biceps to your back to your abs to your shoulders and then all the way back down to your legs. A tremendous amount of internal work is required, which translates to a great workout that may keep you sore for days.

With this routine, you are basically doing what you normally would do for the week, but you will compress it into one session, where a brief moment of time is spent devoted to individual muscle groups. I've also designed it so that more time and more focus are spent on the major groups while a brief, but adequate stimulation is provided for the smaller muscle groups.

The goal of this routine is to do a full body workout in one hour, moving from body part to body part without rest. The object of this workout is to go as hard as you can for the whole hour. You will be supersetting opposite body parts together to make the most of your routine and to make it go quicker. For instance, chest will be with back and you will have to tackle as much chest and back as you can in the allotted time and then move on to biceps and triceps in the allotted time. You will be moving at an extremely fast and hard paced throughout the entire hour that your cardiovascular health is going to improve tremendously and your strength is going to increase. You may not be lifting a lot of weight during the routine and building for mass, but you can be rest assured that you will burn the requisite amount of calories and you will be stimulating

natural growth hormone production in the process by taking minimal rest between sets. The supersetting is going to be tough, but your muscles are going to respond positively. Just be sure to push yourself mentally throughout. Break out of your comfort zone and really make sure you go as heavy as possible for as many reps as you can per each set and then move on the next exercise with minimal rest in between and perform the set with the same attitude. Always remember to stick with the most proper form you can do; form always takes precedent over weight.

To follow this properly, you should move directly from one body part (i.e.-back) straight to the next one (i.e.-chest), then take 10 seconds rest, and immediately go to the original body part you were working with (i.e.-back). Remember that your first couple of sets should be warming up to keep your muscles warm and to prevent injury. Warm up properly by pyramiding the weight up per each set before you get to the one all-out intense set at the last set of the exercise. In other words, the first set should be for lighter weights and more reps to properly warm up and stimulate the muscles with blood flow, and the last set of each exercise should be for heavier weight and lower reps, incorporating an intensity set in the process such as a drop set or a strip set.

Note: If the exercise listed below isn't available to you at that time then try to find another workout similar to the one listed. (Ex: Barbell Squat in replacement of Dumbbell Squat)



Day 1-Full Body

Back Superset w/ Chest:

Pull-ups to Push-Ups-3 sets

Deadlift to Bench Press- 3 sets

Bent Over Dumbbell Row to Incline Dumbbell Press- 3 sets

Wide Grip Lat Pulldown to Incline Fly- 2 sets

Ab-circuit

Machine Crunch to Hanging Leg Raises to Cable Baseball Swings-1 set

1 minute rest

Triceps Superset w/ Biceps:

V-Bar Extensions to Cable Curls- 4 sets

Close Grip Bench Press to Barbell Curls- 3 sets

Cable Kickback to Arnold Curl-2 sets

Ab-circuit

Machine Crunch to Hanging Leg Raises to Cable Baseball Swings-1 set

1 minute rest

Legs Superset w/ Shoulders:

Walking Dumbbell Lunges to Side Laterals Immediately to Front Laterals-4 sets

Back Barbell Squats to Standing Dumbbell Military Press- 4 sets

Hack Squats to Bent Over Laterals-3 sets

Dumbbell Calf Raises to Dumbbell Shrugs-4 sets

1 minute rest

Ab-circuit

Machine Crunch to Hanging Leg Raises to Cable Baseball Swings-1 set

Here is what you should do when you can only go to the gym for two days during the week:

The goal of this routine is to divide upper body and lower body into two separate days (make sure you allot at least 72 hours in between each workout) where supersetting is required but not nearly as much as is necessary for one day full body. Make sure to take some rest in between exercises that are of the same muscle group but not overly so. You should workout enough to catch your breath and clear out the lactic acid, but to the point where you are pushing yourself.



Day 1-Upper Body w/ Abs

Pull Ups Superset w/ Push Ups- 4 sets

Deadlift Superset w/ Bench Press- 3 sets

Bent Over Dumbbell Row Superset w/ Incline Dumbbell Press- 3 sets

Wide Grip Lat Pulldown Superset w/ Incline Dumbbell Fly- 3 sets

Arnold Dumbbell Press Superset w/ Bent Over Lateral Raises- 4 sets

Front Dumbbell Raises Superset w/ Side Lateral Raises- 4 sets

V-Bar Extensions Superset w/ Cable Curls - 3 sets

Skull Crushers Superset w/ Barbell Curls- 3 sets

Dumbbell Shrugs- 1 set of the whole rack going down 5 pounds each time

Machine Crunch Superset w/ Hanging Leg Raises w/ Cable Baseball Swings-2 sets

Floor Wipers Superset w/ Rocky Leg Lifts- 2 sets



Day 2- Chest, Triceps, Front Deltos

Push Ups (Normal, Wide Grip, Close Grip, Decline Normal w/ feet on bench, Decline Close Grip)- 5 sets

Front Dumbbell Raises Superset w/ Side Lateral Raises- 4 sets

Flat Bench Press Superset w/ Incline Barbell Press-4 sets

Incline Dumbbell Press Superset w/ Incline Dumbbell Fly- 4 sets

Skull Crushers Superset w/ Dumbbell Kickbacks- 4 sets

Normal Rope Extension Superset w/ Overhead Rope Extension- 4 sets

Dumbbell Arnold Press- 3 sets

Day 3- Quads, Hamstrings, Calves, Abs

Leg Extensions Superset w/ Leg Curls- 4 sets

Barbell Back Squats- 6 sets

Heavy Farmer's Walk- 1 minute walk with heavy dumbbells

Walking Dumbbell Lunges- 4 sets

Leg Extensions Superset w/ Leg Curls- 4 sets

Standing Barbell Calf Raises- 4 sets

Dumbbell Calf Raises Superset w/ Donkey Calf Raises-4 sets

Circuit of 2 sets of the following:

Crunch/Leglift Combo

Hanging Leg Raise

Rocky Leglifts

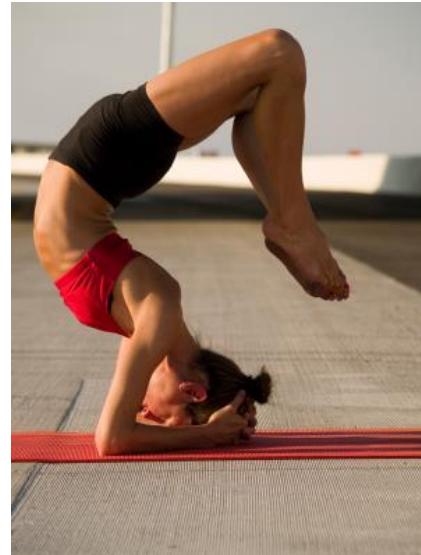
Reverse Crunches

STAY FLEXIBLE

Additionally, you should be performing flexibility exercises everyday to help your body feel and perform better. Flexibility is the normal extensibility (capable of being elongated or stretched) of all soft tissues (muscles, ligaments, tendons) that allow the full range of motion of a joint.

Flexibility training integrates various stretches in all three planes of motion to produce maximum extensibility of these soft tissues. The benefits of muscle flexibility include correcting muscle imbalances, increases joint range of motion, relieves joint stress, decreases excessive tension of muscles, maintains the normal functional length of all muscles, and it helps to achieve optimum neuromuscular efficiency.

There are 2 forms of stretching referred to as static stretching, which is performed without movement and dynamic stretches, which are performed with movement. Static stretching is generally safe and a good place to start for beginners and sedentary individuals, in which the individual gets into and holds the stretched position for roughly 20-30 seconds. Static stretches should be done after your workout to return your muscles to their normal length.



The different types of static stretches are:

1. Passive- This type of stretch requires you to use another person or object to assist you. The person who assists you should be careful when applying the stretch and any object used should be stable. The advantage of this type of stretching technique is that it allows you to reach a greater range of motion. Passive stretching is best to stretch the chest, shoulders, and hamstrings.
2. Active- Active stretching uses opposing muscles (antagonists) to stretch the targeted muscles (agonists or prime movers). The opposing muscle is contracted while the relaxed muscle is stretched. Lifting your leg straight out and holding that position while standing is an example of an active stretch.
3. Proprioceptive Neuromuscular Facilitation(PNF)- This type of stretching should be used with a knowledgeable partner, namely a certified personal trainer. This type of stretching is good for targeting specific muscle groups, increasing range of motion, and improving strength. An example of this would be a hamstring stretch where your partner holds your leg in place during the stretch; the hamstrings are relaxed, the partner then immediately and safely pushes the muscle group past its normal range of movement for 20-30 seconds. That would be one repetition. Rest for about 30 seconds and repeat 3-5 times.
4. Isometric- This form of stretching is similar to passive and PNF stretching except that the contractions are held longer. An example of an isometric stretch would be to contract the calf muscles for 10-15 seconds during the leaning calf stretch. With this stretch, you will relax for 20 seconds and repeat 3-5 times.

Dynamic stretching should be done when you become more experienced with stretching, in which the individual uses movement to increase range of motion and flexibility. The different types of dynamic stretching are:

1. Ballistic- This type of stretching includes using rapid bouncing and swinging motions to force the body part past its normal range of motion. An example of this would be to swing your leg outward back and forth to stretch your outer leg and hip flexors. I do not recommend this type of stretching since it is risky and other forms of stretching will do the same trick with less chance of injury.

2. Dynamic- This type of stretching uses controlled movements to stretch past your normal range of motion. Unlike ballistic stretching, the body part is never forced past the joints' normal range of movement. Examples of this would be side shuffles, backpedals, and plyometrics. This is often called a dynamic warmup, which is definitely recommended during a cardio session where you are performing sprints at top speed. You need to make sure your muscles are warmed up so your muscles can fire rapidly without injury. Also, research shows that a dynamic warm-up prepares an athlete's body best for competition.

3. Active Isolated- Active isolated stretching works by contracting the opposing muscle group, which causes the stretched muscle group to relax. The stretch is only held for 2 seconds at a time though, trying to dynamically stretch your muscle past its normal range of motion. You will repeat the stretch 5-10 times.

Developing a stretching routine that fits into your everyday lifestyle is crucial. A stretching routine does not have to be intense or lengthy. A normal stretching routine should stretch the entire body and all the major muscle groups subsequent to an intense training session and should last about 15-20 minutes. Always remember to breathe deeply in and out while stretching to increase oxygenation and blood flow.



SELF MYOFASCIAL RELEASE TECHNIQUES

7

Self myofascial release with foam rolls (SMFR) is a very important piece of the puzzle to your flexibility program. Not only do foam rolls take out adhesions and knots in the muscles, but will also help increase your elasticity in the muscles by improving your flexibility. By taking out the calcium deposits and adhesions, this will ultimately improve your performance, since your muscles

will be able to get a better contraction from more muscle fibers during peak muscular contraction while lifting weights.

SMFR is like getting a massage. The foam roller is one of the most effective techniques for releasing tension while improving mobility. Foam rolling exercises will release and organize your muscles, as well as release and align your skeletal system. Muscle injuries such as strains, tears, and broken bones can be avoided with proper flexibility and neutral skeletal alignment. Foam rollers are best used on the lower back and legs. You will support your bodyweight with your toes and your elbows, allowing the foam roller to roll up and down your body. When you reach a tender spot, that means you have an adhesion there, so it is best to ease pressure on the foam and try your best get the knot out.

SELF REHABILITATIVE FLEXIBILITY

8

If you have suffered a serious injury, the initial recovery period should always begin with you working with a physical therapist. The main goal is not only to rebuild strength in that area, but also to regain the flexibility and strength of the injured area, while restoring the range of motion. You should proceed with caution when you begin any exercise. Restoring the range of motion is critical because it lays the groundwork for future training. Range of motion should be restored in all 3 planes of motion. For example, if you had a knee injury, you might have to begin your exercises with partial range of motion (working towards full range) in one plane, and then gradually work towards including exercises that require sideways, rotating, twisting or turning actions. Once your range of motion is restored, you can then begin to introduce light weight training exercises and stretching exercises to strengthen the injured muscles, tendons, and ligaments. You need to make sure you don't push it too hard, because reinjuring yourself



will only set you back farther. The main thing with injuries is that it is very important to strengthen the areas surrounding the injured area. I suffered from a full tear in my rotator cuff and a split in my biceps tendon from multiple dislocations in wrestling. It was a gradual process getting back to full strength, however, the biggest asset in getting me back up to speed was my desire to weight train and strengthen my deltoids with lots of side lateral raises and front raises. The use of machine weights, isometric exercises (the injured area contracts but doesn't move), resistance bands, or bodyweight exercises are necessary in the rehabilitation process.

GAINS ARE MADE OUTSIDE OF THE GYM

As discussed many times throughout this program, the recovery of where your muscles repair itself is through sleep, nutrition, and the proper hormonal environment you surround yourself in. While training and nutrition play tremendous roles in your physique, your off days from the gym are literally just as important.

Muscle growth does not take place while you are lifting weights. Although it is necessary for stimulation, muscle growth occurs outside of the gym. Lifting weights temporarily weakens the muscle by tearing and damaging the muscle fibers of the muscle bellies, and with adequate nutrition and the proper rest, the muscles grow back bigger and stronger to better adapt to the stressing condition you've placed upon it. It is up to you to recover your body properly outside of the gym. I already told you about making sure not to lift too frequently, but here are some ways to enhance your recovery process:



- 1) Take Glutamine:** Glutamine is one of the most important amino acids, which serves as a building block for protein. Glutamine can increase muscle cell hydration and aid in protein synthesis. It is the most abundantly naturally occurring nonessential amino acid in the body, which means that the human body produces it naturally. However, since it is produced naturally in the body, glutamine levels are often depleted during exercise. Glutamine has been known to reduce healing time. Therefore, you should take a 5-10 mg of glutamine (preferably, in powder supplement form) directly after you workout.
- 2) Take Fish Oil:** Besides the immense benefits of fish oil for the heart, it is also ideal for muscle recovery. Waste from energy production and broken proteins occur in your muscles during exercise, especially at high intensity. This results in inflamed muscles that are swollen and sore as well as temporarily weaker. This reaction is mediated by immune signals called cytokines that initiate inflammation. The omega 3 fatty acids in fish oil help to reduce post-exercise

inflammation by reducing levels of inflammatory cytokines, which fights off the soreness you may feel a day or two after you exercise.

3) Have a Post-Workout Shake: Protein shakes have numerous amounts of nutrients, including vitamins and minerals, which are essential for muscle growth and repair. Carbohydrates are needed after a workout to make up for depleted glycogen storage and to create the necessary insulin spike to shuttle proteins into the muscle to start the healing process. Try to have a ratio of 2 grams of carbohydrates for every gram of protein. By just taking in protein, you halt the muscle breakdown but you don't give your muscles an opportunity to grow. You need both.

4) De-Stress: Stress promotes cortisol and all kinds of catabolic (muscle-wasting/fat-growing) hormones to set yourself up for disaster no matter how hard you train. You should not go to failure on every set. We are human beings, not machines. Your body cannot recover properly from going to failure on every set. Too much lactic acid builds up and your muscle fibers become too torn that they can't adequately repair themselves. Stimulate, not annihilate. Your muscles need proper stimulation but there is a limit as to how much they can take.



5) Get Proper Sleep: During sleep, your body releases natural growth hormone that helps repair muscle tissue. Most importantly, sleep may have the best effect on alleviating stress. Stressing yourself fatigues your central nervous system, which may directly correlate to less muscle growth and repair. Anytime you are stressed, it is hard for your body to do anything positive. Therefore, the more sleep you have, the better it may be for your muscles in the long run. Also, make sure you consume some sort of casein protein, a slow-digesting protein (such as cottage cheese) before bedtime. When you sleep, you deprive your body of vital nutrients for hours at a time (since you are obviously sleeping and cannot eat). Casein protein, like that found in cottage cheese, keeps your muscles flooded with nutrients throughout the night to help repair your muscles and to stimulate growth.

6) Cooling Down- Cool downs are also an essential part of your workout routine. After a hard workout, you should never just walk out of the gym right after a really hard set. You need to get your heart rate back to a resting state through a gradual process and to achieve sufficient blood flow throughout the muscles and the whole body to help flush out the toxins that result from high intensity exercise. Cool downs help your body in the repair process. It helps prevent post-exercise muscle soreness by keeping the blood circulating. When blood is circulated it helps prevent blood pooling and helps remove waste products from the muscles. It also provides the body with adequate nutrients through the oxygen that the blood produces. Doing cool downs will guide you in proper muscle growth and recovery.

The following is what you need to do as part of a proper cool down routine:

1) Light weight: You should end your workout with 3-4 sets of lighter weights for your cool down. Think of cool downs as the opposite of warm ups. You should gradually decrease the weight and still do higher reps. Let your body adjust to lighter weight and do more reps to ensure proper blood flow. Never just abruptly stop a workout routine; make sure you get a nice pump in your muscles with lighter weights than your heavy intensity sets.

2) Light Jog: Doing cardio after your workout is often a good idea. However, if you don't have time, you should aim to do a light jog of about 5-7 minutes and gradually end with a walk. It will get your heart rate down and prepare your warmed muscles even more for stretching.

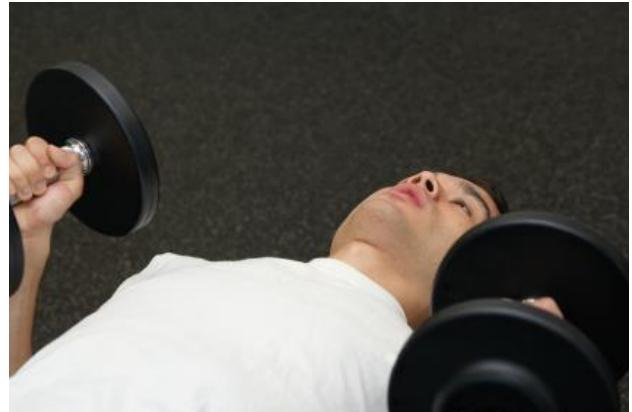
3) Stretching: You must stretch your already worked out muscles for many reasons: to keep the muscles flexible, to improve your range of motion, improve recovery time and prevent injuries. Although a 15-minute stretching period is ideal for most and may be the best means of stretching, many people do not have the patience to stretch for this long after a grueling and long-lasting workout. Therefore, you should at least shoot for a 5-7 minute quick stretch. You should do 2-3 sets per stretch exercise and hold it for a period of 30 seconds per set. Even better, try dynamic stretching as discussed above.

BUST THROUGH YOUR PLATEAU

Ahhh! The old workout plateau! What to do? It afflicts all of us at some point of our training career (some earlier than others) and few of us ever get out of it. In fact, most people don't even know that they have hit the dreaded plateau and thought that their muscles can only grow so much due to inherent genetic factors. Not to worry though, you can bust through it!

The human body is fantastic at adaptation. So whatever routine you are on, your body will get used to it. You need to make sure that you rest for at least one week every 6 weeks and that upon coming back, you change your routine for the next 6 weeks until you take off for another week. For example, you can change certain subtleties such as the order of your exercises or reverse your whole routine around entirely. By changing your routines, you not only shock your muscles to new growth, but it will also prevent the boredom that comes with doing the same thing all the time.

You need to add plenty of variance to your routine and remember that your body needs to remain a growing organism, looking to improve. You have to switch up your routine often and that means switching up from working out individual body parts to performing full-body workouts two or three times a week. Otherwise, your body might progress by doing an upper-body/lower body split twice a week. This will allow



you to train more vigorously and concentrate on activating more muscle fibers and your stabilizer muscles. It will also allow more time for your body to recover between workouts. Also, perhaps you need to do higher rep schemes. NFL superstar wide receiver Terrell Owens often incorporates a 100-rep day where he does 100 reps for every exercise for the entire week. You can also spend a full hour on each body part for a week. Another way to shock your muscles is to employ circuit training. This can boost your metabolism and provide for some awesome muscle gains if you're not used to the vigor of training with no rest. You need to remember that you constantly have to keep your muscles guessing with slight variation every week and extreme variation every 6 weeks.



Photo: Brian Moss (www.brianmoss.com)

STRIVE FOR PERFECTION

More importantly, see how you respond to what you do. Constantly gauge yourself. If you don't see a particular muscle group growing, sometimes just attacking it harder and with more fury than before while giving it even more time to recuperate than you're used to will do wonders.

Deeply embedded into our nature is a tendency to be comfortable. As individuals, we enjoy being at ease, contented, and relaxed. Rarely do we enjoy pushing our minds and bodies to extend our outer limits. Seldom, do we push past our comfort zone. As a result, we frequently avoid daunting tasks.

We prefer minimal responsibility and a lack of undertakings. However, being at ease does not benefit us. It only makes us relish in our inadequacies. It does not better us in any regard. We don't get smarter. We don't get tougher. We don't get stronger. We don't improve. Instead, we need to do everything in our power to take on those daunting tasks in an effort to improve. It is what builds us up as individuals. It is by developing our character and cultivating a certain breed of mental toughness.

It is up to you to take each moment of every day as an opportunity to jump into the deep end and improve. You need to start reaching for new heights to jump levels and look to improve yourself in every facet including fitness. You may never have gone to failure on a set before, but you will only benefit yourself by doing so, both mentally and physically. The only way you improve in this world is by placing yourself in a more uncomfortable environment than you are used to, in an effort to take on those daunting tasks. You may not be able to bench press 315 pounds yet or even do a pull up yet, but by not jumping into the



proverbial deep end, you'll never get there. You need to experience something different to get new results.

The level above us always seems incredibly intimidating, so we usually avoid it. It is discouraging to "lose" and it is frightening to stick your neck out there. It's part of an unfamiliar territory where we become uneasy, past our comfort zone. We are all comfortable doing undemanding and painless tasks. We are all comfortable winning. Our mind is at ease when we know we can succeed without any challenge or defiance. However, what comes with comfort is an elimination of your progression as an individual altogether. It is up to you to go into those unchartered waters of extending past your comfort zone, because it is those moments that define you into the person you will become. You should never stay satisfied with where you currently are in the present. You should be continually striving for something more.

I'm sure you've heard of the phrase, "practice makes perfect". The more one practices, the better he becomes at that act. It's simple. Put in the time and results will show, and nothing can be more true when it comes to building muscle or losing weight. However, what doesn't seem to be so simple for many people is actually putting in the time to do it.

People just expect outrageous results immediately. For instance, there have been numerous occasions that I have gone to the driving range with friends who've rarely played the game of golf. These inexperienced golfers expect to hit the ball straight and far every time they swing the club. They get frustrated with themselves for not being able to do it, even if they've taken a six month hiatus from their last outing. Then they quit and do the same thing 3 months from that date. Is that a sensible way to react? We just expect the most of ourselves from anything and if not we get frustrated. We simply become aggravated and



subsequently become discouraged from performing that activity again because we're not good at it. You'll never be good at anything if you approach your behaviors similarly. We've got to look past those initial performances, because in reality, how can we expect ourselves to be good at anything for the first time.

Everything in life takes a lot of hard work if you want to be good at it. We need to plug away, hours and hours a day, at a particular activity to become even better than average at it. People often forget that aspect of it: We need to put in the effort and time in order to be successful in anything. The key to success is just in striving for perfection. You should always want to lift more weight, take less rest between sets, eat better, run faster, and learn more. We'll never be faultless in anything we do in life, but our goal ought to be to come as close to perfection as possible. In turn, this can only occur with plenty of preparation, intense practice with an incessant vigor to improve, and actively learning to get better.

Developing any ability is very analogous to learning a new language. Could you expect to learn Italian after only speaking it a few times? That is preposterous to even have it cross your mind. You need to speak for hours a day EVERY DAY; you can't let up by skipping a week here and there. You'll never learn the language that way. In turn, you'll never be good at anything with that approach. Developing ability is possible only through repetition- both in mind and in body. Recurrences of the activity and studying the material on a daily basis are the only way you will be good at something. Do you remember everything that you learned during your first semester economics class if you aren't an economist now? No, how could you? Your memory fades when you don't repeat the activity on a daily basis and your skill fades when you don't work at it every day. You need to study this guide over and over again as if each day were a test.



Being successful requires an incessant vigor to improve each and every day. For instance, if you are a lawyer, you have clients who depend on you every day. They want you to represent them as they would represent themselves if they knew the legal system. They come to you to personify them; all of your legal decisions affect their life. They want the best representation possible and they want you to be right all of the time. After all, we are human though, and one can never get it right all of the time. Don't expect to. But if you told your client, "I'm only right 75% of the time", do you think they would hire you? They want you to be right 100% of the time. We know that's not possible, but we want to be as close to 100% as possible. We want to strive to be 100% even if we'll never get there. Every day of practice gets us one step closer to that 100%. We just need to push ourselves to actually put in the time and effort. Each successive act brings you that much closer to perfection, whereby you should envision it as a long staircase that never ends; and each practice/rep of that activity is one step. You can never reach the top, but you can always be better off than you were before. No one can be perfect and no one can, in their right mind, expect to be. If you do expect to get everything right all the time, you're setting yourself up for failure. However, what you should do is never settle for anything less than *strive* to reach the top of that endless staircase. You'll be amazed at how far it'll take you in everything in life. It's just up to you.



DON'T EVER GIVE UP

As a motivational speaker I like to think that I have some influence in getting people to deliver the most out of themselves, but at the end of the day, the only motivation that really compels you to do something in this life is self motivation.

No matter what incentives are out in front of you and no matter who is telling you what to do, the only thing that matters at the end of the day is if you are willing to do it yourself. When it comes to training or life in general, you've got to be the one who wants to approach life with a heightened sense of desire to improve. It can't come from your boss at work, or your girlfriend/boyfriend at home; it's got to come from within and there ultimately needs to be a burning desire to produce formidable results. That motivation needs to manufacture itself from an internal source, so it can be used to approach the activity with a heightened inclination to manufacture the greatest effects. You are your own driving engine in this world and you are your own brake, meaning you are the only one in this world who determines your results in this world.

It is not about the genetics you don't have or the talent that you weren't blessed with. Anyone successful in this world got to where they were because they were willing to make as many sacrifices as necessary to get there. You have the ability to achieve anything you want in this world if you put in the time and the effort every single day. The ability to succeed comes through the will to break through all obstacles and mental barriers; you must be willing to break through your comfort zone to reach the incredible, delaying instant gratification along the way. It is that point in which you feel like quitting, but find something deep within you to light a spark in order to achieve something special.



Real triumph lies in getting knocked to your knees, and getting back up again to fight forward in an attempt to achieve something more, something exceptional.



Real glory comes when you are never satisfied with your past performances, but are always wanting more in the future, willing to do whatever it takes to achieve those goals. Real victory comes with setting goals for yourself that seem so far reaching that they seem impossible to attain at the present moment, but with that inner will and hard work over time becomes a reality. You have the ability to get a six pack and to achieve everything you want in this world. It's yours for the taking if you just have the willpower to never quit. As Michael Irvin said during his emotional speech at the 2007 Football Hall of Fame induction: if you "ever doubted, thought [you] did not measure up, or wanted to quit...look up, get up, and don't ever give up".



TRAINING REFERENCE GUIDE

- A combination of weight training and cardiovascular training is essential for anyone of all ages and genders. Get a gym membership today! It will be the best investment of your life.
- There is no such thing as a toned muscle. You build muscle and you burn fat through a combination of training and nutrition.
- You should be training roughly an hour a day 5 times per week.
- To build muscle, you need to present your muscles with overload, or more resistance than they are currently used to.
- If you leave any muscle group out, this could cause an imbalance in your muscles and possibly lead to injury. You need to hit every muscle group once a week.
- A thorough warm up and cool down is necessary.
- Start with your larger muscle groups and then proceed to the smaller muscle groups.
- Free weight, compound movements with heavy loads that require the work of dozens of muscles at once will have the biggest effect on your body.
- Always choose a standing version over a seated version of an exercise to not only gain more out of it, but to also burn more calories.
- Pay attention to your posture and engage your core in every movement you're doing to keep your balance and protect your spine.
- Each repetition needs to be done with a slow and controlled movement and needs to be done with your mind concentrating on stimulating the muscle, not just trying to get the weight up.
- You need to stress quality over quantity. You are not at the gym to show off the amount of weight you can do. You are there to work out the muscle group you have targeted. Form always wins.
- Follow the principles of H.I.S.T. Your goal in the gym is to stimulate the muscle, but not annihilate it with volume training. Therefore, work up to one crazy set per exercise, where you will go to complete failure by implementing one intensity set.

- Pick a heavy enough weight that forces you to grimace, but one that you can handle, but with smooth form.
- Take off at least 1-2 days a week from doing any type of training and one week off every 6 weeks where you add variance upon your return.

MOVE ONTO THE 45 DAY PLAN

***IT'S TIME TO MOVE ONTO THE 45 DAY PLAN SO
YOU CAN BEGIN TRAINING AND EATING RIGHT
SO YOU CAN GET IN THE BEST SHAPE OF YOUR
LIFE!***

HAVE FUN!