**BY MIKE WESTERDAL** 

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ICAL BENCH.com

THE CRITICAL DELOAD

ROUTINE

**CNS RECOVERY SCHEDULE** 

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### What Is Deloading?



The term "deload" by basic definition is this: to take a break from extreme training.

The proper time for someone to take a deload can vary from person to person. For example, some powerlifters do a lighter week every fourth week of training when in a meet cycle. For competitive powerlifters deloading is usually a one week affair.

The Critical Bench Program is a hybrid powerbuilding program that includes a lighter deload workout in week 5.

Since the Critical Bench Program is a relatively extreme program with low reps and heavier weights I recommend varying your training routine for up to four weeks after completing the program before attempting to continue to make gains with the program.

After the following this four-week deload routine, feel free to move on to the next max chart. Ultimately you must know your own body and decide whether you need a shorter deload or period or a longer one for that matter —do what's right for you.

Most experienced lifters know their bodies and know when they need a longer break.

In fact, there's nothing wrong with taking an entire week off from time to time. It can be good for the body *and* the mind. The no pain, no gain mindset can lead to serious plateaus.

Here are some of the primary reasons you want to deload after an extreme lifting program:

- To rest your mind
- To keep your intensity and motivation levels high
- To avoid the risk of overtraining
- To give your mind a rest
- To make sure you don't peak to soon prior to competition
- In order to continue progress and making gains
- In order to avoid an injury

I read the following explanation of deloading by Dr. Mel Siff, a world-renowned exercise scientist in Jason Ferruggia's <u>Triple Threat Muscle</u> book:

"Optimal progress is made if the increased loading phases are alternated periodically with decreased loading phases. Continual monotonic increases (constantly increasing the load without ever backing off) from workout to workout or week to week may lead to overtraining, stagnation or injury. It is vital to remember that tissue repair and growth occur predominantly during the restoration and transition periods between training sessions and not during the heavy loading phases."

The Critical Bench Program boasts a strategy that—if followed—will enable you to add up to 50 pounds to your max in just ten weeks. The Critical Bench methods are tried and true and have been used successfully by guys everywhere.

However, whether you're following the Critical Bench Program or any other training routine you might be using, you can't keep doing the same program over and over and with maximum intensity and expect to keep getting the same results.

The fact of the matter is this—rest is as equally important to achieving your muscle and strength goals as the actual training itself.

In fact, your muscles don't grow *at all* while you're working out. Sure, they'll get nice and pumped after you've blasted out your sets. You look in the mirror and think, "Damn! I look good!" But sadly, you know that doesn't last too long.

A couple hours after you're out of the gym, the pump goes away and your muscles go back to the same size they were before. You look in the mirror and instead of reflecting on how *big* you are, you think, "Yikes! What happened?" So, if your muscles don't get big when you're training, just when *do they grow?* 

Here's what happens—all the muscle growth and strength gains actually take place while you're *resting*. Even while you're busy snoozing, your body is actually hard at work, adding mass and making your muscles stronger.

Understanding the basics about why muscles grow and get stronger might help. Lifting weights stresses our muscles—in reality causing very tiny injuries to the muscles. In response to these "micro-injuries," the muscles get stronger (and bigger) so that the next time the body faces this same amount of "stress," the muscles don't get injured.

You see, the body doesn't know what's causing the stress. It can't tell whether you're lifting weights or trying to defend yourself from a roving mountain lion—it is entirely focused on self-preservation. It is doing its best to make sure that the next time you face the same situation the muscles aren't subjected to the same micro-injuries. And it accomplishes this by over-compensating just a bit, making the muscles a little stronger and a little bit bigger than before. It's really amazingly simple how it works.

It does go deeper than that though. We are creatures of habit. We get used to doing something and we just keep on doing it hardly even thinking about it. Our bodies are the same. We start a routine, see some gains and then all of sudden it stops. What happens? What happens is that our bodies get accustomed to the routine. It gets used to it. Essentially, it knows what to expect and as far as it's concerned, it doesn't see any reason to "react" to the stress, so the gains stop.

The lesson here is this: to get your muscles to grow bigger and get stronger, you need to stress them hard in the gym (by working out hard), then you need to provide them with what they need to grow, which is rest and nutrition.

# Hopefully you're going to be training your entire life, so don't make the mistake of turning a marathon into a sprint.

The bottom line is this. Even if your body doesn't really "need" a deload after the Critical Bench Program, it's not going to hurt you—and will in fact help you—if you change your routine for a few weeks.

Unfortunately the same is not true if you skip the deload and forge ahead right into your next training cycle. If your body needs a rest, it will get one whether it has your permission or not.

When the body needs a rest and it's not getting what it needs, the stage is set for sickness and injuries to set in. And when this happens, your body is saying that it NEEDS the rest whether or not you like it.

### **Overtraining**



At some point, this happens to just about all of us—but it is especially common among guys just starting out with strength training. For the beginning bodybuilder, it's obviously really exciting to see the changes your body undergoes after a couple months of training.

This of course makes him excited so he goes back to the gym and hits it even harder and before long, he sees even more results. Knowing that he's on the right path he starts training harder than ever before, going to the gym seven days a week.

But this time, he's not seeing the results he expects at all. In fact, he feels like he's back-tracking. Now he's disappointed and realizes that he's not feeling so good. But, he keeps up the pace at the gym hoping to "break through the wall" and get past it.

That doesn't happen though and soon he finds that he's washed-out, tired, drained, and has a serious lack of energy. He's also sore all over, is having difficulty sleeping, has frequent headaches and is noticing a sudden, persistent drop in performance.

Sound familiar? Has this happened to someone you know? Maybe even you? And the worst part is that these symptoms are just the start. From here the symptoms get even more severe.

Overtraining is no laughing matter. It affects you physically, mentally and behaviorally.

Overtraining is a real condition that occurs when the volume and intensity of an individual's weight training exceeds his recovery capacity. And once it sets in, getting back to "normal" can take far longer than we'd like--up to four to six weeks in some cases.

There are a number of different theories as to what actually takes place to cause the "shift" to overtraining. These include:

- Repeated micro-trauma of muscles and connective tissue brought on by too much weight training and too little rest. This eventually stimulates an auto-immune response, allergic reaction to foreign molecules, and inflammation. This leaves the body less able to handle infection.
- Glycogen depletion induced by excessive, prolonged training with insufficient recover time, which leads to depleted energy stores in muscle and nerve cells, affecting the autonomic nervous system.
- Prolonged excess levels of cortisol and other stress hormones which upset the body's natural balance, causing problems with the hormone regulatory system.
- Increased infection and immune response caused by amino-acid imbalances resulting from excessive, prolonged training.

One way to avoid overtraining is to schedule a break from weight training every 12 weeks or so by taking a week to ten days off. But for a lot of guys, that's easier said than done. While yes, it gives their bodies the time off they need, emotionally they go through hell because they're not training. And depending on how disciplined you are, for some, the one week rest is often extended to two or three weeks--or more.

Deloading is the other--and better--way to avoid overtraining. But unlike a straight out rest period, deloading allows you to keep working out, without ever "losing your stride," while still providing your body with the rest it needs.

And also unlike a rest period, during your deloading phase you don't have to lose any gains you've made from your regular, high intensity workouts. With deloading, when it's time to get back on track, most guys are surprised to see how easy it is to slip back into

the high intensity mode. With rest periods, a lot of guys find that they need a couple of weeks to get back into their groove.

Of the two options, I think you can see that deloading clearly offers the most advantages. If you don't deload as needed you run the risk of overtraining. And if you overtrain, you're begging for:

- Reoccurring colds and sickness;
- Sore joints and muscles;
- Unwillingness to go to the gym to train;
- Loss of appetite;
- Insomnia;
- Chronic fatigue;
- Increased injuries;
- Moodiness and irritability;
- Lack of energy, and more.



# Don't Use Overtraining As A Crutch



You need to be careful though because for a lot of guys (and I do mean a *lot*), the whole concept of "overtraining" becomes their crutch. For days and weeks without end you'll hear them say things like, "Oh, I don't want to push it *too* hard and overtrain."

You'll see them go through their entire routine without pushing themselves or even breaking a sweat. If you could monitor their heart rates while they are training you'd see that it probably never once gets over 100 beats per minute.

Why would they do that and cheat themselves? Because it's *easier* to work out light, than it is to train *hard*. Think about it. Why does 90% of the population never step foot in a gym and why do 80% of guys who *do* make it to the gym and start to lift weights quit after a just short while? Because it's hard, that's why. Face it. Humans are basically LAZY. We don't want to anything that makes us feel like we're doing work.

What I'm saying is don't use overtraining as an excuse. Obviously yes it happens but overtraining is not as common as a lot of people seem to think. Your muscles can handle a lot more than you think they can. Hell, just think back to our ancestors the Gladiators and the Spartans. You need to understand the difference between just being

lazy and legitimate overtraining. Don't let overtraining be your cop-out. And don't fall into the habit of this becoming your primary routine. Use it sparingly—every 12 weeks or so should be about right for most guys. By no means should this become your main program that you use for months at a time.

The reason want to follow a deload routine after a power program is not just to give your muscles a rest, but to give your bones, ligaments, tendons and central nervous system (CNS) a break from the demands that you have put on it.

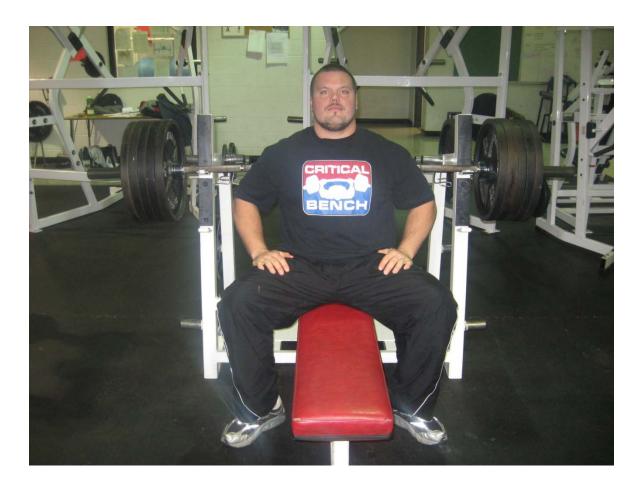
Overtraining wreaks havoc on our hormonal systems and our central nervous system. There have been plenty of studies showing that overtraining impacts the endocrine system, which causes an imbalance of hormones.

Male hormone imbalance symptoms from overtraining vary from muscle soreness to mood swings to depression to irritability to anxiety. In addition, because the endocrine system is affected, recovery from overtraining does not occur as it should.

Many researchers also believe that overtraining causes an increase in the levels of stress hormones which then suppresses testosterone and growth hormone production (among others) while causing Cortisol levels to spike. This can not only lead to increases in body fat but it can also put the body in a catabolic state where instead of "building up," it's actually "breaking down," meaning that you are getting *smaller* not bigger.

Similarly, overtraining places an incredible amount of stress on the central nervous system. The CNS of course controls just about everything in our bodies. Suffice to say that if the central nervous system isn't happy, then *nothing* in our bodies is going to function as it should.

### The Body's Amazing Ability to Adapt



The human body is one of the most amazingly adaptable organisms on earth. It is absolutely mind boggling. In particular, I'm talking about the body's ability to adapt to the stresses we place on it. In fact, this adaptability to stress is why we're able to lift weights and get bigger and stronger. Increases in mass and strength are the result of the body's response to the "stress" of weight training.

The way that the body adapts to stress is known as the General Adaptation Syndrome (GAS) or the SAID (Specific Adaptation to Imposed Demand) principle. Whether you call it GAS or SAID, it means the same thing--that when the body is placed under some form of stress (like from lifting weights), it starts to make adaptations that will allow the body to get better at withstanding that specific form of stress in the future.

These physiological adaptations are the premise of exercise and weight training in particular. When stress (weightlifting) causes the body to increase effort more than it is normally accustomed, the body has been put into a situation of "Overload". This status of being in overload will temporarily decrease the body's ability to do work (lift the same

amount of weight). But once the body has had sufficient time to recover from the original training session its work capacity increases to a level greater than the original. Pretty cool, isn't it?

If things just cruised along like that indefinitely, we'd all be happy--and monstrously muscular. But, nature doesn't work that way. It's like this....."everything works and nothing works forever."

What does that mean? It means that if you start a new routine--almost any routine--you will see results. They may not necessarily be the results *you* want to see but you will see results. Basically, "everything works." But, nothing works forever. In other words, it doesn't matter *what* routine you're doing, eventually you get to a point where your body becomes accustomed to the routine. Once this happens, your returns (gains) diminish and then flatten entirely.

This happens because your body's "mission" is to achieve a state of homeostasis (balance). Unfortunately, homeostasis is *not* conducive to Power-Building. To continue to get results you have to make changes and shake things up to knock the body *out* of homeostasis and get the results you want.

The body's ongoing efforts to achieve a state of homeostasis are why fad diets don't work. For example, a chubby fellow decides to go on a starvation diet because he wants to squeeze his fat rump into the jeans he wore in college for the upcoming reunion.

So he stops eating entirely, drinking nothing but water and fortified chicken broth. At first, he's thrilled because the pounds are melting off. Then he notices that it's not coming off so fast and pretty soon, it's like he's hardly losing anything at all. He gets frustrated and depressed and runs off to the donut shop to drown his sorrows.

Obviously, this man doesn't understand the way the body works. Yeah, he lost a lot of weight at first because the sudden lack of food was a shock to his body's systems. But being ever adaptable, the body reacted by slowing down the metabolism, burning fewer and fewer calories each day.

You see, the body has no way of knowing that this guy is trying to lose weight. It thinks he could be lost in the desert somewhere dying of starvation so it kicks into survival mode, slowing down its systems to conserve energy.

Understanding this very basic principle is the key to continually making gains in both size and strength. When your routine lets your body shift into a state of homeostasis, it's time to make a change.

### Ways To Vary Training and Still Workout



Like I said earlier, it's not necessary that you take a complete break from weight training in order to give your body the rest it needs and avoid overtraining. Deloading will also help you to avoid those annoying plateaus (which by the way, often occur shortly before you hit the point of overtraining).

When you begin your bodybuilding routine--no matter what it is--your body is forced to adapt to the movement, volume and intensity. As your body seeks to adapt to your routine, the stress of weight lifting causes micro-injuries to the muscle cells, triggering the "growth mode."

In the growth phase (with the actual growth of your muscles occurring while you are recovering from your workout), works to become accustomed to these movements so that the next time you encounter the same "stress," the muscles are prepared.

Beyond this--once the body actually becomes accustomed to the routine--your results start to level off and then disappear. This period is known as a plateau, which is when you need to change what you are doing. As we've discussed, deloading is an excellent, effective way to make that needed change.

Below are some of the different ways that you can deload to avoid overtraining.

- Reduce the volume by 45% across the board: This one is pretty simple-just take whatever volume you're lifting each session and slash it by 45%.
- Change your workout split: Try mixing things up a bit. Instead of doing a 3-day split, try a 2-day split, or a 4- or even 5-day split.
- Select new exercises: It's not only boring for your mind to do the same thing day in and day out. It bores the body too. Once our bodies become accustomed to a routine, that's when the returns start diminishing. Shake up your routine every now and again.
- Reduce the intensity: You can also try reducing the intensity of your workouts. Just like reducing the volume, reduce the intensity of your training by about 45%.
- Do more cardio: If you don't normally do much cardio, now is the time to throw some in. This will get your heart pumping, shake up your metabolism, give your muscles a rest and keep your enthusiasm up. Be careful not to overdo it though because extended periods of cardio can burn up muscle.
- Switch from barbells to dumbbells (or vice versa): If you normally work out with barbells try working out for a couple weeks with dumbbells. Or if you normally train with dumbbells, then give the barbell a whirl for a while.
- Isolation exercises: Compound exercises that involve multiple muscle groups are the foundation of real muscle growth. Compound exercises mimic real-life movements that we do in everyday lives. If you are used to doing compound exercises than switching the focus to isolation exercises for a while can help you deload. You can do any type of isolation exerciseeven if they're movements that you normally wouldn't care about.
- Stretching and strengthening: Another way to deload is to spend some time at the gym focusing on stretching and strengthening your core. Stretching is something that most bodybuilders don't pay enough attention to anyway so it can be good for you all the way around. It will not only give your major muscle groups a much-needed rest, but it can also help to improve your flexibility and range of motion. By doing that, you can help reduce the likelihood that you'll injure yourself.

### **Recovery Tactics**



In this section I want to focus again on the topic of recovery. I go back to this subject again and again because seriously, so many people just don't get it. They fail to understand one of the most basic, fundamental principles of bodybuilding—*muscle growth does not take place in the gym, it happens during the recovery phase.* 

Obviously yes, what you do in the gym is important but what happens is that far too many guys focus exclusively on this at the expense of recovery. And then when they don't get the results they want, they wonder, "What the hell is happening?" You know what usually happens next. They step up the pace at the gym focusing even more on their workouts and even less on recovery. This does nothing more than to lock them into a perpetual cycle of frustration accompanied by no gains and lots more injuries.

Look at it his way—the time you spend in the gym training your muscles is nothing more than the "spark" that sets the growth process in motion. Recovery is the "flame" that fuels the growth. You can't have one without the other. While the body is in recovery mode, the muscles are following through on the process set in motion by the workout, getting bigger and stronger. One of the most important concepts to understand, and one that most people fail to acknowledge, is the fact that when it comes to building muscle, recovery is everything. Our muscles ultimately grow because of our accomplishments in the gym, but this does not mean that they grow in the gym.

Weight training places an incredible amount of stress on our bodies--not just the muscles but the endocrine and central nervous systems too. If you don't allow for sufficient time to recover, your body will be physically incapable of achieving the lifting goals you'd like to realize. Remember, that like a lot of things, the real magic happens behind the scenes, while we're resting.

I've seen it time and time again--overtraining is one of the biggest mistakes newcomers and misinformed "old-timers" make. I don't feel like I would be really doing my job if I didn't stress this over and over: You need to pay attention to your recovery like you pay attention to your lifting.

Some guys seem to think that "real men" don't need to take time off. I--and every other knowledgeable coach I've ever met--am here to tell you, "that's a big heap of bull." Real men know the importance of rest and change and more important, they're willing to develop the discipline to do it. Don't sell yourself short and make the mistake of overtraining--you'll be glad you did.

Now that I've drilled that into your head (I hope), let's go over some techniques that can help your recovery.

#### **Benefits of Foam Rolling**

If you don't know what one is, a foam roller is really nothing more than a cylindrical piece of some type of extruded hard-celled foam. Think pool noodles that you see kids splashing around with but a little more dense and larger in diameter.

Foam Rolling is often touted as sort of a "self-massage" technique. Foam rollers are often used by bodybuilders to provide self massages for myofacial relief. They are also effective for increasing blood flow to comfort aching muscles and improve flexibility. They're really very versatile and can be used all over the body.

You use a foam roller by placing it on the floor and then placing the body part you want to "massage" over the roller. Then use your body to roll back and forth over the roller.

#### ART Therapy

ART is a soft-tissue chiropractic technique that specifically targets the injured area. Feedback on ART has so far been very positive. Because of the way it's administered some people might say that ART therapy is a "massage," but make no mistake-it's not. ART therapy is a movement-based technique that is actually patented. It was developed in the early- to mid-nineties by a Colorado Chiropractor P. Michael Leahy, DC, CCSP. He developed the technique after observing that his patients' symptoms were apparently related to changes in the soft tissue that he could actually feel with his hand.

Based on that observation he began tracking how the soft tissues (muscles, fascia, tendons, ligaments and nerves) responded to different types of treatments (soft tissue work). From there he developed the ART program-which is made up of more than 500 different specific moves to treat problems with muscles, tendons, ligaments, fascia and nerves, back pain, shoulder pain, sciatica, knee problems, tennis elbow and more. Nearly all of these are pains that can be common among strength athletes like strongmen, powerlifters and other competitive athletes.

A lot of these problems are caused by soft tissue injuries that usually occur in one of two ways: acute conditions (pulls, tears, strains, etc.); or accumulation of small tears caused by doing the same movement over and over (micro-trauma). When these things happen, they can cause the body to produce dense scar tissue in the areas affected. The scar tissue builds up and as it does, the impact it has becomes more widespread. As a result, we suffer from a reduced range of motion, a loss of strength and of course, pain.

When these kinds of injuries occur in a strength athlete-especially one who is competing-it can be devastating because our tendency is to "work through the pain." But what happens then is we overcompensate because of the pain and wind up not only exacerbating the original injury but often times, we end up with more than we had in the beginning.

So in these kinds of circumstances, ART therapy can be ideal for the strength athlete. It starts with a comprehensive evaluation by a certified therapist. The evaluation takes about an hour. Its purpose is to pinpoint the injury, determine its severity and then establish the proper therapeutic regimen. ART therapy works by treating the abnormal tissues (scar tissue) by combining precisely-directed tension combined with very specific movements from the patient. The big benefit here is that the treatments can generally alleviate the problem after just a few visits. That means no lengthy down times.

#### **Benefits of Massage**

A post-training massage therapy session can leave the bodybuilder feeling relaxed, refreshed and energized. And of course anything that helps the body to relax is a good thing because being in a relaxed state puts the body into recovery mode. Other benefits of massage include increased blood flow (important for improving delivery of nutrients to the muscle cells), relief from muscle tension and improved flexibility.

Massage therapy has also been shown to cause the body to release endorphins, which not only make you feel better but enhance (and hasten) your recovery while boosting performance.

#### **Benefits of Chiropractic Care**

Chiropractic medicine is a drugless healing profession. The basic concepts of chiropractic are that the body has a powerful self-healing ability and that the body's structure—primarily the spine—and its function are related.

The goal of chiropractic therapy is to normalize this relationship. Essentially it says that our self-regulating and self-healing functions are controlled by the brain, spinal cord, and all the nerves of the body.

The Chiropractic adjustment is used to increase range of motion, increase circulation, reduce swelling and pain, and remove nervous irritation. The overall purpose of the Chiropractic adjustment is to optimize conditions that facilitate the body's self-regulating and self-healing functions.

#### Benefits of Meditation, Prayer and Relaxation

As we have discussed, muscle growth occurs during periods of rest, not when you are active. Knowing this, it would only make sense that placing the body into a heightened state of relaxation can only be beneficial, correct? The answer is a resounding, "Yes!"

Both meditation and prayer have been scientifically proven to induce the body into a relaxed state. Putting the body into a true "relax" mode, stimulates the recovery process. For the serious bodybuilder regular use of meditation and prayer have shown to enhance and hasten post-training recovery of the central nervous system. You don't have to spend a lot of time doing it either. In fact, as little as 15-20 minutes a day can yield big benefits.

Spending time meditating or in prayer will leave you feeling refreshed and energized. Both are also extremely useful in helping bodybuilders to visualize their goals and increase focus and direction on attaining those goals.

Doing this consistently can enable you to overcome self-imposed limitations and achieve gains you never thought were possible.

#### We All Love Sleep Don't We? But Who Has Time...

Cortisol, testosterone, growth hormone and insulin; these are all powerful hormones that play a key role in the muscle-building process.

Cortisol is an important hormone that is secreted by the adrenal glands. It is involved in the following functions and more: proper glucose metabolism; regulation of blood pressure; insulin release for blood sugar maintenance; proper immune function; and facilitating the body's inflammatory response.

Testosterone is of course the primary male hormone. It's what makes a man a man. Not only is it responsible for sexual function but as an anabolic hormone, it is also a primary driver of muscle growth and strength. That's why men are generally a lot bigger and stronger than women.

They've got lots of estrogen (the female hormone) with just a little testosterone and we're just the opposite. We've got lots of testosterone with just a little estrogen. Anabolic hormones "build up" the body—in particular, the muscles.

Growth hormone is a protein hormone that is actually comprised of about 190 amino acids. Growth hormone (GH) is synthesized and secreted by cells called *somatotrophs* that are located in the anterior part of the pituitary gland. GH is a major factor in controlling a number of complex physiologic processes, including growth and metabolism. GH is classified as an anabolic hormone so like testosterone, it plays a role in building muscle.

Insulin is also a hormone. In our bodies it plays a very important role in regulating the energy and glucose metabolism in the body. Insulin causes cells in the liver, muscle, and fat tissue to take up glucose from the blood, storing it as glycogen in the liver and muscle. Insulin stops the use of fat as an energy source. When insulin is absent, glucose is not taken up by body cells and the body begins to use fat as an energy source.

Each of these important hormones is impacted by the amount and quality of sleep we get each night. As I said earlier, when we think we're busy snoozing, the body is actually at work producing these and other hormones and recovering from the day's activities. Deep sleep, also called "slow-wave sleep," is thought to be the most restorative sleep stage. This is when all the really magical stuff happens.

When you don't get a good night's sleep, everything gets thrown off track. Sleep deprivation causes Cortisol levels to rise. When this happens, your memory can become impaired, your insulin resistance goes haywire (making you more susceptible to gaining weight) and your ability to recover from weight training is reduced dramatically.

Similarly, lack of sleep means your body produces less testosterone and less growth hormone. With less of these two anabolic hormones roaming around your body, you can kiss your gains good bye.

And as we just said, lack of sleep changes your resistance to insulin, making it far easier for you to develop fat—especially around the middle. In fact, a 2007 University of Texas showed that less than a week of poor sleep quality can result in weight gain and elevated blood sugar.

Simply put, sleep deprivation has a negative effect on every one of these very important hormones. How's that as an incentive to get your rest?

#### Sleep TIPS

Here are some tips to help ensure that you get a good night's sleep:

- 1. Stick to the same "go-to-bed and wake-up" schedule: Sticking to a schedule helps reinforce your body's sleep-wake cycle and can help you fall asleep more easily at night.
- 2. **Don't eat or drink large amounts before bedtime.** Eat a light dinner at least two hours or more before sleeping and don't drink large amounts of liquids just before you go to bed.
- 3. Avoid nicotine, caffeine and alcohol in the evening. Nicotine and caffeine are both stimulants. You shouldn't smoke anyway so enough said. Don't drink caffeine for at least eight hours before bed time. Your body doesn't store caffeine, but it takes a while to eliminate the stimulant and its effects. And contrary to popular belief, alcohol does not help you sleep but interrupts it.
- 4. **Exercise regularly.** Regular physical activity can help you fall asleep faster and make your sleep more restful.
- 5. **Make your bedroom cool, dark, quiet and comfortable.** Studies have shown that it's hard to get a good night's sleep in a bright room. Keep your room cool, dark, quiet and comfortable to fall asleep faster.
- 6. **Sleep primarily at night.** Yeah, everyone loves the occasional daytime nap but the truth is that they may steal hours from nighttime slumber. Limit daytime sleep to about no more than one half-hour and make it during mid-afternoon.
- 7. **Make sure your bed is comfortable.** Features of a good bed are subjective and differ for each person. But make sure you have a bed that's comfortable.

- 8. **Develop and maintain a relaxing bedtime routine.** Do the same things each night to tell your body it's time to wind down. Do whatever you like, whether it's taking a warm bath or shower, reading a book, or listening to soothing music. Get your body "in the mood" for sleep.
- 9. Go to bed when you're tired and turn out the lights. If you don't fall asleep within 15 to 20 minutes, get up and do something else. Go back to bed when you're tired. Don't agonize over falling asleep. The stress will only prevent sleep.
- 10. **Don't take sleeping pills.** It's just not a good idea. They may help you fall asleep faster in the short term but in the long term, they interrupt sleep patterns.



That's Not My Teddy Bear. It Belongs To My Wife! I Swear

### **Supplements to Aid in Recovery**



The human body is nothing less than amazing. All we have to do is take care of it by providing it with proper nutrition, exercise and plenty of rest, and it takes care of everything else. For instance, when we catch a cold, we don't have to "tell" the body what to do—it already knows how to deal with the situation. At the first sign of a cold, it issues marching orders to its defense systems and they take over.

It's the same with recovery after training. We don't need to tell the body what to do. It knows what to do and just asks that we provide it with the optimal conditions in which to do its job. The body gets its fuel to facilitate the recovery process from the foods we eat. That's why it's especially important for bodybuilders to focus on eating lean proteins, complex carbohydrates and unsaturated fats. It is from these that the body manufactures the tools of recovery. And in our case, the tools of recovery are the substances that our muscles need to recover and get bigger and stronger.

In a perfect world, we would get 100% the substances we need to recover from the foods we eat. Sadly, in today's modern world that's not always possible. Modern technologies and processes allow us to have convenient access to food that wasn't

possible a couple generations ago, but along the way, a good portion of the nutritional content gets lost.

That's where nutritional supplements come into the picture. In addition to eating healthy, taking supplements can help ensure that our muscles have ready access to everything they need for the recovery process. Remember that the purpose of supplements is to "supplement" our diet, *not* to be the sole source. Here are some of the supplements most effective in helping the body recover:

• **Protein**: This is the granddaddy of supplements because protein is *the* primary building block of muscle. You absolutely must have an ample supply of protein in order to add lean mass and increase strength. Proteins are organic compounds made up of carbon, hydrogen, oxygen and nitrogen. It is the presence of the nitrogen which sets protein apart from other nutrients. Since we have no other source of nitrogen (being unable to absorb it from the air, like plants can), one of the most important roles of protein is to bring nitrogen into the body. Protein powder is generally consumed immediately before and after exercising, or in place of a meal. Having sufficient protein intake allows for efficient growth and repair of muscle tissue. The different types of protein powder are whey, casein, white eggs, soy, etc.

#### Reviews:

http://www.criticalbench.com/Whey-Protein-Supplement-Review.htm

• **Chondroitin**: Chondroitin sulfate is produced naturally by the body. It is usually found attached to proteins as part of a proteoglycan. Its role is to provide elasticity to bone cartilage and in doing so, helping to ease training-induced trauma to the joints.

Reviews: http://www.criticalbench.com/Chondroitin-Supplement-Review.htm

• **Glucosamine**: Another naturally occurring compound. It is found in cartilage, synovial fluid, and other components of joints. Like chondroitin, it aids in flexibility and elasticity. Glucosamine and chrondroitin are often combined into a single capsule or powder.

#### Reviews:

http://www.criticalbench.com/Glucosamine-Sulfate-Supplement-Review.htm

• **Glutamine**: This is the popular name for L-Glutamine. Glutamine can be found in protein powders, beans, meats, fish, poultry, dairy products. It is the most abundant amino acid (building block of protein) in the body. Stored in the muscles, it strengthens the immune system and aids in recovery after training.

Reviews:

http://www.criticalbench.com/Glutamine-Supplement-Review.htm

• **MSM**: Methylsulfonylmethane (MSM) is a naturally-occurring nutrient found in small amounts of many foods. Studies have shown that it is effective in increasing joint comfort and supporting a normal range of motion, which is important after a strenuous workout.

Reviews:

http://www.criticalbench.com/MSM-Supplement-Review.htm

• **Shark Cartilage**: This is what it sounds like—processed cartilage taken from sharks. It has been touted as being effective against a host of conditions but it is most often taken to improve joint function and help speed post-training recovery.

Reviews: <a href="http://www.criticalbench.com/Shark-Cartilage-Supplement-Review.htm">http://www.criticalbench.com/Shark-Cartilage-Supplement-Review.htm</a>

• L-Arginine HCL: This naturally occurring semi-essential amino acid aids the recovery process by boosting the body's metabolism.

*Reviews:* <u>http://www.criticalbench.com/L-Arginine-Supplement-Review.htm</u>

• Branched Chain Amino Acids (BCAA): Isoleucine, Leucine and Valine—these three amino acids together comprise the BCAA. For bodybuilders these are the most important amino acids. They work together synergistically and are very important to the growth, maintenance and repair of muscle tissue.

*Reviews:* <u>http://www.criticalbench.com/BCAA-Supplement-Review.htm</u>

## Injuries



As a power-builder it is important to understand that there is a difference between being hurt and being injured. To be hurt is to be experiencing pain, either physically or emotionally. You can feel pain from a bump on the head, a slap on the face, or a pinch on the cheek but you're not actually injured. Yeah, you may be "hurting," but it's nothing that is going to really cause you any further problems.

To be injured means that there is something physically wrong as a result of an event.

The injuries might be internal, and it is possible that you may not feel any pain, but regardless, there is still something wrong, and it needs to be addressed.

So if you are just hurt, don't be a wuss—deal with the pain and move on. On the other hand though, if you are injured you need to get professional help.

Talk to a professional and find out what is wrong. If you head to a regular doctor, listen to what he (or she) says but do take the advice with a grain of salt. Remember that most doctors do not understand just how important lifting is to you. Most of them will tell you not to lift for six to eight weeks or even more. If possible, try to find a sports clinic or at least a doctor who is accustomed to working with athletes and their injuries.

A *strong* word of caution—*avoid prescription drugs if at all possible.* The problem with prescription drugs is that for the most part, all they do is mask the symptoms—they don't solve the underlying problem that is causing the pain. Like they say, "Painting a dead leaf green doesn't mean the plant is okay."

You want to treat the *cause* of the pain, *not* just the symptom. If you don't address the underlying cause of the problem the symptoms could go on indefinitely. If you want real relief, you need to find out what is wrong, do some research on your own and find out just what your options are.

In some—but not all—cases, you can treat a minor injury with either heat or cold. But, how do you know when to apply heat and when to apply cold?

The basic rule of thumb says that for most injuries, you never start with heat. The reason is that most injuries usually involve inflammation that leads to swelling.

If you apply heat you're encouraging more blood flow, which leads to increased swelling and greater discomfort. In most cases you want to start with cold. The application of cold to injured tissues constricts blood vessels, slowing internal bleeding (a factor in bruise formation), and relieving pain and spasm by limiting swelling. Ice should be applied for the first 72 hours or until all visible swelling is gone.

Do not apply ice directly to the skin. Make sure you put a towel or something between the ice and your skin. For best results on a fresh injury, the ice should be applied for 10 to 20 minutes at a time, with an hour break between applications. You can make your own ice pack by freezing a water-filled zipper-closing bag flat like a magazine, or using crushed ice.

You should generally wait 24-48 hours after applying cold, before applying heat. Use heat 20 minutes at a time at least 24 hours after a minor injury or 48 hours after a more serious one. Place a heat pack directly on the injured area but do not add pressure. You should not apply heat directly to broken skin.

Tendonitis (formal name tendinitis) is a common injury for people who work out a lot.

Tendonitis is inflammation, irritation, and swelling of a tendon, which is the fibrous structure that joins muscle to bone. The areas of the body most commonly affected by tendonitis are the shoulder (rotator cuff tendinitis or impingement syndrome), elbow (tennis elbow or golfer's elbow), wrist, knee (jumper's knee), and ankle (Achilles tendonitis). Tendonitis occurs when there is unnecessary constant stress passing from the muscle through the tendon, irritating it.

The key to recovering from tendonitis is to restore those muscles back to their normal loose and relaxed state.

Since tendonitis involves both inflammation and swelling, put ice on the injured area when the pain makes its first appearance.

You can also take an over-the-counter anti-inflammatory such as ibuprofen. Don't take the ibuprofen for more than a day or so. If the tendonitis is in your wrist, elbow, knee or ankle, you can lightly wrap the area using a bandage or a neoprene sleeve.

Be very careful *not to wrap the area tightly,* as this will just cause more swelling. Only wear the wrap when you're training. Remove it immediately afterwards.

Tendonitis is annoying and painful but shouldn't lead to serious injury. Personally I get elbow tendonitis from time to time. When I do I'll wear elbow sleeves to keep the area warm and apply muscle rub before a workout. The muscle rub doesn't do anything really, it just causes a warm burning sensation so you don't really notice the pain, but it doesn't do anything to heal the problem. Unfortunately the only way to really resolve it, is to take a break from doing the exercises that cause it to flare up. Your guess is good as mine as to how long this will take. You can train through it if you have to, but eventually you're going to have to let it heal up.

# Enough Talking: On the Next Page, You'll Find The: CRITICAL DELOAD ROUTINE

Follow for 2-4 Weeks After You Have Completed Any Strenuous Program Lasting Up To 12-Weeks

# Follow For 2-4 Weeks

# Day 1 - Chest, Shoulders, Abs

1) Dumbbell Chest Press: 3 sets x 12 reps, 60 sec. rest between sets

2) Push Ups: 100 total reps. Multiple sets may be required

3) Standing Dumbbell Press: 3 sets x 12 reps, 60 sec. rest between sets

4) Plate Raises: 3 sets x 12 reps, 60 sec. rest between sets

5) Wood Chops: 3 sets x 12 reps, 60 sec. rest between sets

Conditioning:

Dumbbell or Kettlebell Swings: 3 sets of 20 reps, 60 sec. rest between sets

# Day 2 OFF

# Day 3 – Back, Legs, Abs

1) Pull Ups: 3 sets x 12 reps, 60 sec. rest between sets

- 2) Twisting DB Rows: 3 sets x 12 reps, 60 sec. rest between sets
- 3) Dumbbell Step Ups: 3 sets x 12 reps, 60 sec. rest between sets
- 4) Dumbbell Lunges: 3 sets x 12 reps, 60 sec. rest between sets

5) Bicycle Crunches: 3 sets x 20 reps, 60 sec. rest between sets

Conditioning:

Jump Rope: 8 sets x 30 seconds per set, rest 15 seconds between sets

# Day 4 OFF

# Day 5 – Arms, Abs

- 1) EZ Bar Curls: 3 sets x 12 reps, 60 sec. rest between sets
- 2) Concentration Curls: 3 sets x 12 reps, 60 sec. rest between sets
- 3) Close Position Pushups: 3 sets x 12 reps, 60 sec. rest between sets
- 4) Overhead Cable Extensions: 3 sets x 12 reps, 60 sec. rest between sets
- 5) Ab Wheel Roll-Outs: 3 sets x 20 reps, 60 sec. rest between sets

### Conditioning:

Burpees: 100 total reps. Ex: 5 sets x 20 reps with 60 sec. rest between sets.

Day 6 OFF Go for a walk, do some stretching.

Day 7 OFF Play some basketball or go for a bike ride.

#### NOTES:

- You can click each exercise above to see a video demonstration and written definition.
- If you want to replace an exercise feel free to do so using the Critical Bench Exercise Database: <u>http://www.criticalbench.com/exercises/exercises.htm</u>
- If you are getting bored with the routine above after 2-weeks swap out exercises using the exercise database.
- If you continue this routine through weeks 3 and 4 you should drop your repetitions to 10 reps per set excluding abs and conditioning.
- 3-days a week of weight training is plenty during a deload period. If you're getting anxious to workout harder and more often it's probably time to start the <u>Critical Bench Program</u> again.