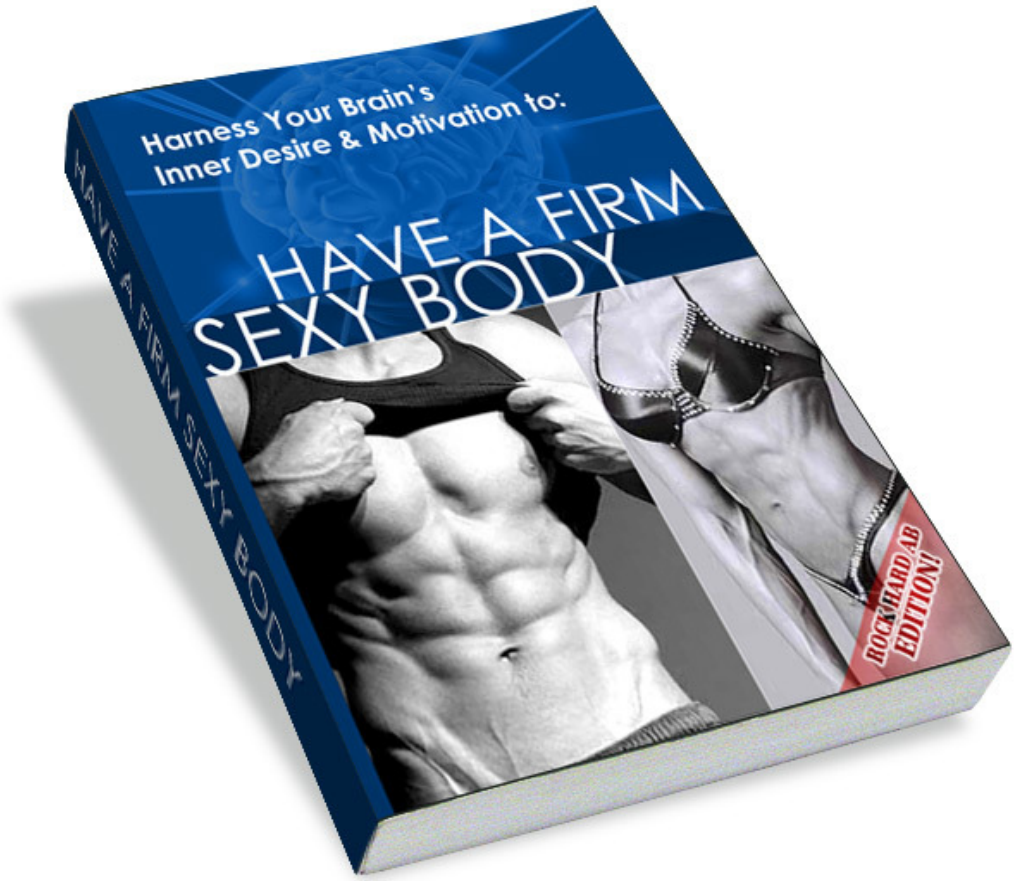
Warrior Fitness Training System

"Extreme Fitness for Lifetime Fitness"



Warrior Fitness Training System - Strength Training Program

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http://WarriorFitnessTraining.com

Warrior Fitness Training is a BIO (by invitation only) athletic and fitness preparation system. We work with committed individuals only, and do not work with "the general public". However specialized and custom e-routines are available per request. To find out more please visit our web site at
http://WarriorFitnessTraining.com

Contents

Information to Support your Training

Information to Support Your Training

1.) Introduction

Information is provided in the following areas:

- Strength training
- Flexibility training
- Nutrition

This information is generalized and aimed at

- Enhancing your knowledge about your training
- Helping you understand the training programs provided
- Providing you with a ready source of “help” to answer questions as they arise

Change your mind…change your life!

About Mind Power

Id like to thank John Kehoe and his assistance with the below information. I've personally used this system for years and have achieved astonishing results. This information and the Mind Power system is a practical course which will help you to achieve ANY goal you choose. In reading this information you may end up asking yourself, "What does this have to do with fitness?" I'll tell you…everything! If you go into the Warrior Fitness Training System with the same mindset and motivation that you used with other programs you will get the exact same results. If however, you're open to a new way of thinking about your mindset, everything ii your life, including fitness will improve and improve dramatically!

Looking to Change Your Life?

If you want to make changes in your life, you must look to the cause, and the cause is the way you are using the conscious mind - the way you are thinking. You cannot think both negative and positive thoughts at the same time. One or the other must dominate. The mind is a creature of habit, so it becomes your responsibility to make sure that positive emotions and thoughts constitute the dominating influence in your mind.

In order to change external conditions, you must first change the internal. Most people try to change external conditions by working directly on those conditions. This always proves futile, or at best temporary, unless it is accompanied by a change of thoughts and beliefs.

Awakening to this truth, the way to a better, more successful life becomes crystal clear. Train your conscious mind to think thoughts of success, happiness, health, prosperity, and to weed out fear and worry. Keep your conscious mind busy with the expectation of the best, and make sure the thoughts you habitually think are based upon what you want to see happen in your life.

Water takes the shape of whatever container holds it, whether it is in a glass, a vase or a river bank. Likewise, your subconscious will create and manifest according to the images you habitually project upon it through your daily thinking. This is how your destiny is created. Your life is in your hands, to make of it what you choose from.

What Is It That Makes a Person a Winner?

"It's all in the mind," says Arnold Schwarzenegger, Governor of California and multimillionaire, successful real estate tycoon, movie star, body-builder and five-time winner of the Mr. Universe title, Arnold has it made. But it wasn't always so. Arnold can remember when he had nothing except a belief that his mind was the key to where he wanted to go.

"When I was very young, I visualized myself being and having what it was I wanted. Mentally I never had any doubts about it. The mind is really so incredible. Before I won

my first Mr. Universe, I walked around the tournament like I owned it. The title was already mine. I had won it so many times in my mind that there was no doubt I would win it. Then, when I moved on to the movies, the same thing. I visualized myself being a successful actor and earning big money. I could feel and taste success. I just knew it would all happen."

The technique Arnold is talking about, the technique that brought him so much success is called visualization. Visualization is using your imagination to see yourself in a situation that hasn't yet happened, picturing yourself having or doing the thing you want, or successfully achieving the results you desire.

Let's say you want to be more confident. Using visualization you picture yourself working, talking to people, all with great confidence. You imagine yourself in situations that normally give you difficulty and you see yourself in these situations as confident, at ease, and performing well. You might picture your friends and associates complimenting you on your newfound confidence. You feel the pride and satisfaction of being a confident person and in your mind you enjoy the things that happen to you as a result of your confidence. You visualize everything that would or could happen to you and live as if it really is happening to you.

Any thought put into your mind and nourished regularly will produce results in your life. What is it that you want in your life? Better health? Then get health consciousness. Greater prosperity? Get prosperity consciousness. More spirituality? Get spirituality consciousness. Everything exists as a possibility. All that's required is for you to feed in the necessary energy until your objective becomes your own.

How reassuring it is to think that no matter what a person's past or present situation, no matter how many times he or she has previously failed, if that person would but regularly feed his or her consciousness, his or her situation would change! This remarkable ability has been given to each and every one of us to use or to ignore. It costs no money. It takes no special talent. It takes only the decision on your part to take the time and put forth the necessary effort to develop the appropriate consciousness. That's all! Everything else will automatically fall into place.

The Subconscious

In order to understand how the conscious and subconscious minds work together as a team to create your reality, let me again use an analogy. Your subconscious mind is like fertile soil that accepts any seed you plant within it. Your habitual thoughts and beliefs are the seeds which are being constantly sown within, and they produce in your life what is planted just as surely as corn kernels produce corn. You will reap what you sow. This is a law.

The conscious mind is the gardener. It is our responsibility to be aware of and choose wisely what reaches the inner garden. But unfortunately for most of us our role as gardener has never been explained to us. And in misunderstanding our role, we have allowed seeds of all types, both good and bad, to enter our inner garden.

The subconscious will not discriminate. It will manifest failure, ill health and misfortune just as easily as success and abundance. It works to reproduce in our life according to the seeds we have nurtured within. Your subconscious accepts what is impressed upon it with feeling and emotion whether these thoughts are positive or negative. It does not evaluate things like your conscious mind does, and it does not argue with you.

Synchronicity

Once you grasp the fact that your subconscious will bring to you whatever you need, and you begin working, daily projecting the thoughts and images of what you want, seemingly chance and fortuitous events will begin to happen to you. Your powerful inner collaborator, working with your instructions, will bring to you the people and circumstances you require to meet your goals. "A thousand unseen hands," as Joseph Campbell describes them, will come to your aid. Synchronicity appears to the uninitiated to be coincidence or luck, but it is neither. It is simply the operation of natural laws which you have set in motion with your thoughts.

Let me explain how it works. Modern physics now sees the universe as a vast, inseparable web of dynamic activity. Not only is the universe alive and constantly changing, but everything in the universe affects everything else. At its most primary level, the universe seems to be whole and undifferentiated, a fathomless sea of energy that permeates every object and every act. It is all one. In short, scientists are now confirming what mystics, seers and occultists have been telling us for thousands of years - we are not separate but part of one giant whole.

We also now know that everything in the universe is made up of energy. The chair that you're sitting on is comprised of energy. The walls of the room that you are now in, your computer, the events that happen to you are all made up of vibrations of energy. And our thoughts, too, are vibrations of energy. Our thoughts are of the same substance as the building blocks of the universe. Once we become aware of this remarkable fact, we can use it to our great advantage.

When, for example, you begin imprinting success upon your subconscious mind, it sets up a continuous vibration of energy that resonates upon the whole. The subconscious works day and night with this success vibration, attracting to you the people and circumstances necessary for your success. And remember that the subconscious will work equally hard to attract to you the circumstances necessary for your failure if that is **how you habitually think.**

We are fortunate that the laws of physical reality and the laws of the mind are now beginning to be understood. In years past, it might have seemed incredible that we could create our reality through this process, yet now, with these new insights, we understand how it works. Our thoughts being energy, it only makes sense that our repeated images, affirmations, visualizations, deeply held beliefs, fears and desires, vibrating within the

larger web of reality, would have an affect upon that reality. In fact, when you stop and really think about it, since we are all connected, how could it be otherwise?

What You See is What You Get - Part I
(A New World Is But a New Mind)

How do you perceive the world around you? Is it friendly? Hostile? Filled with adventure and pleasant experiences, or is it restrictive and riddled with disappointments. Is it easy to get in shape, or does it take tons of effort? Are there lots of opportunities to get ahead financially and make a lot of money, or have most of the good ideas come and gone? Is life enjoyable, pleasant, boring, exciting, hard?

In attempting to answer the above questions, you might ask yourself the following: What does my experience tell me? Each of us will answer this question in a slightly different way, and sometimes we will contradict each other with our answers. Yet, amazingly enough, each of us will be right. Whatever you answer is right and true... for you.
Life does not consist of any absolute truths as we understand them. Life is much more fluid and dynamic than that. It is as diverse and varied as the people who experience it, and what you experience without has its root cause within. You are a law unto yourself, and what you believe within will be both the lens through which you view the world, and the attracting force by which countless experiences will be drawn to you.

You have more power to create and influence your life than you ever suspected. In fact, you are creating your life this very moment by your inner beliefs and the thoughts you are choosing to entertain. Your thoughts and beliefs are not merely inner perceptions and attitudes, but are actual physical vibrations of energy as real as the floor below you and the clothes you wear. They are the main creative forces in formulating the life you now are experiencing, and in determining what will happen in your future. Simply stated, your thoughts and beliefs are the single most important factor in your life, and one over which you have total control. Yet most of us pay them minimal if any attention.

How We See the World

Each of us naturally assumes that we see the events and circumstances of our life as they actually are, that we are objective. But this is not the case. We see the world and ourselves in it, not as it is, but as we are, as we are conditioned to see it. We see it through the lens of whom and what we are. To know this is to know something great, for no one gets to view the world without a lens (a perspective colored by beliefs, expectations and past experiences). Our mind processes all experience through this filter, and often that experience gets misinterpreted in the process. Discovering and seeing what is really going on in our life is actually far trickier than you might suppose. In fact it is almost impossible, for one never gets to view the world without a lens (perspective). The best we can do is exchange different lenses (viewpoints, beliefs), and decide which is more accurate, or at least which one feels right, much the same way as going for an eye exam to discover the right lens to counteract an eye deficiency.

In fact this analogy is quite apt in helping us to understand our present situation.
If you find you're seeing is hampered, with objects and people seemingly out of focus and fuzzy - you don't say life is out of focus - you don't blame out there. You see what you can do to correct your vision. You try a number of different lenses - some make your vision seem better, some make it seem worse, and eventually you settle on one that feels right.

It's exactly the same with our life. The problems and obstacles we encounter in life are caused by what is within. Your lens is both distorting and creating your reality. When you change your lens, your reality will change.

Here's What Happens

The events of our life, whatever they are, are always being interpreted by our mind's lens. All available data coming to us is sifted, weighed and brought to our attention or dismissed. Information or events running counter to our concepts will be ignored to a large degree, or distorted in such a fashion to fit in with what our mind sees as reality. Now let us take this even a step further and you will begin to see how powerful your beliefs are.

All physical reality is made up of vibrations of energy. The chair you sit on, the walls that surround you, your physical body, everything is made up of vibrations of energy. This is not a theory or concept; this is a fact known and understood by physicists. Our thoughts and beliefs are also vibrations of energy consisting of the exact same substance. Thoughts that are repeated again and again, especially if done with feeling and emotion, will gradually take an imprint on the subconscious. Once this happens a remarkable transformation takes place. These imprintings vibrating within us attract from the outer web of reality the people, circumstances and events that co-relate with what is within. These crystallized beliefs channel your energy and act as a magnet.

You must understand again that your ideas, thoughts, beliefs do not exist as phantoms or shadow images without substance. They are electromagnetic realities operating within your nervous system attracting and creating the experiences of your life.

The more we become aware of this and realize how our experiences are influenced by our inner programs, the more we can be creative with our beliefs and consciously change and experiment with the lens we wear.

Beliefs are as necessary to us as physical organs. We cannot exist without them. We need parameters to interpret what is happening in our life. One will never be without beliefs, nor should one want to be. What you do want, however, is to decide whether the beliefs you now have are serving you well.

We need to see and understand the lens through which we are viewing the world. We need to view it without criticism or judgment, and thus to know ourselves at a deep level. We need to know ourselves as our subconscious knows us. This means being courageous,

but if we can do this we might discover within ourselves limiting and self-defeating beliefs that are holding us back from achieving what it is we want.

To illustrate this let's examine what happens to two individuals who have completely opposite beliefs, each living their lives with a different lens. One person sees the world filled with opportunities waiting to be discovered and acted upon. He imagines himself being successful. He believes his actions, creativity and ingenuity will reward him abundantly. He believes that he has what it takes to be tremendously successful. These beliefs become internalized and the lens through which he sees the world. They also become his inner vibration which, acting upon the outer web of reality, is forever attracting or repelling people, circumstances and events. His lens affects his emotions, feelings, daily way of thinking, and influences his actions and decisions.

Another person believes that the odds are stacked against him. He believes that all the good opportunities to make money have been taken, and that those that haven't are too difficult to find. He believes that life is hard and filled with disappointment, and no matter what he does he is probably doomed to failure. Like with the first person, these beliefs also become internalized and the lens through which he sees the world. They also become his inner vibration which, acting upon the outer web of reality, is forever attracting or repelling people, circumstances, and events. They affect his emotions, feelings, daily way of thinking, and influence his actions and decisions. It is not hard to imagine what possibilities exist for each individual, and what probable futures await them.

You form the fabric of your experience through your own beliefs and expectations. You take your beliefs about reality as truth, and often do not question them. They seem self-explanatory. They appear in your mind as statements of fact, far too obvious for examination. Therefore they are accepted without question. They are not recognized as beliefs about reality, but are instead considered characteristics of reality itself. Frequently such ideas appear indisputable, so it does not occur to you to speculate about their validity. They become invisible assumptions that form and create your personal experiences.

As I mentioned earlier, and paradoxically, in the preceding example, both individuals are correct. You might expect that I would say that the more positive one was closer to reality. Not at all. Both realities are valid and real. Each will attract to them according to what they vibrate within. They will reap what they sow. Neither is more correct than the other. There are countless realities awaiting each individual, according to his or her beliefs. It is simply a matter of determining the beliefs we will hold.

What You See is What You Get - Part II
(A New World is But a New Mind)

Once we become aware of how much our daily experiences are influenced by our inner programs, the more imperative it becomes to examine our beliefs and be prepared to change those beliefs that are limiting us. To do this we need to see and understand the "lens" through which we are viewing the world. We need to view it without criticism or

judgment, and to know ourselves at a deep level. We need to know ourselves as our subconscious knows us. This means being courageous, but if we can do so we may discover within ourselves limiting and self-defeating beliefs that are holding us back from achieving what it is we want. We must deal with our beliefs directly. There is no other way to lasting change. Each belief must be examined carefully. Not as to whether it's true or not, for "our" truth will always match the lens we wear and thus be validated, but as to what effect it may be having upon our life. Many limiting beliefs have unfortunately been accepted by us, have taken root within the subconscious, and are now reflecting back to us as experience.

Remember all beliefs will seem real in terms of physical data, since your experience in the outside world is the manifestation of these beliefs. So your approach in changing beliefs is not to ask whether they are real or not, but rather to ask if these beliefs serve you well. Do these beliefs assist or hinder me in my goals? As an example, I would like you now to list below ten beliefs about money and success. Do not concern yourself with whether these beliefs are positive or negative, or whether other people believe as you do. We are looking for your beliefs. Nobody else need see this list or even know about it. But to be effective it must be done with complete honesty, and from your inner truth and experience. You might want to close your eyes for a minute to prepare. When you're ready, list your beliefs before you continue reading.

Now read over the list. Imagine, one by one, these beliefs resonating within you, attracting or repelling circumstances according to their vibration. As you do this, it will be clear to you that some beliefs are working for you and some against you. Now beside those that are working against you, hindering you, place an X.

Now examine each belief with an X independently. Realize that because you believe it and experience it does not mean this belief is real in any absolute sense. It may be real for you in your life and experience, but what does that prove? Only that you are experiencing that reality and are living the truth of that belief. But is this belief and truth real for everyone? Here we can test this belief. Ask yourself these questions:

- Does every single person have this belief?
- Does it conform to every lens?
- Are there people who do not have this belief, and if so what are their experiences?

By doing this what you will find is that no belief or truth is absolute in any real sense. This being so, you can choose to free yourself of any undesirable belief and take on whatever new one you want. You literally get to choose your beliefs.

Changing beliefs can be accomplished if you're willing to keep an open mind. It will take courage and discipline, and initially what you will be doing will defy your logic and senses, but this is a small price to pay for harnessing the powers of your mind and taking charge of your destiny.

Before I go any further let me state clearly that no one can change your beliefs for you,

nor can they be forced upon you from without. You and only you can decide what it is you will choose to believe.

The system I'm proposing to you will, however, take a certain leap of faith. It cannot be explored half-heartedly, but will demand a genuine commitment. I am not offering a philosophy but a practice, and this practice will take a daily commitment. **Are you up for the challenge?**

I hope so, because the astounding fact is that you can create whatever reality you choose by working with your thoughts and beliefs. Once you begin applying these methods this fact will become self-evident, and will be validated by the new realities you will be manifesting. A glorious life of power, abundance, health and prosperity awaits you. It all lies within.

Importance of Eliminating Negative Thinking

Eliminating negative thinking is not simply about having a good attitude or feeling good or being positive just for the sake of being positive, although all these things have their benefits. It goes much deeper than that. The student of Mind Powers recognizes that thoughts are real forces and that how we think directly affects the things that happen to us.

Our mind is like a garden, and we are the master gardeners. Through care and diligence we can create a botanical masterpiece, or through neglect our garden can be a mass of weeds--negatives, insecurities and failures. Understanding this, it becomes our duty and responsibility to eliminate negative thinking.

Five excellent techniques for eliminating negatives from your mind!

Each technique is separate and independent from the other. In fact some of these techniques will seem contradictory, but each will be highly effective in dealing with negative thinking.

The first technique is called cut it off.

With this technique, the instant you recognize that you are thinking a negative thought, you end it. You don't argue with it, you don't analyze it, you don't defend yourself against it. You cut it off. The moment you recognize that you're thinking a negative thought, simply cut it off and insert a totally different thought into your mind. And the key here is the instant you recognize you're thinking a negative thought. So whenever you become aware of negative thinking, act immediately, cut it off and set a totally different thought into your mind.

The second technique is called label it.

As soon as you recognize that you are thinking a negative thought, instead of cutting it off as you did with the first technique, label it. You say to yourself, "What is happening inside me now is that I am experiencing 'a negative thought.' "That's all it is, and you keep reminding yourself of that. You keep reminding yourself that "It's only a negative thought. It's only a negative thought."

I'm going to share an astounding truth with you that will help you immensely in ridding yourself of negatives. I'm going to write it in bold red underlined letters and I would like you to read it over at least three times before you continue on, so that it becomes imprinted into your mind. Here it is:

Negatives only have power over you if you react to them!

Go back and read it again. Continue to read this statement until you fully realize that it's you reacting to negatives that gives them power. The minute you start worrying in this way, the minute you start reacting to the negative, the minute you start working yourself up about it, it's got you. But when you recognize that negatives only have power over you when you react to them, then you simply choose not to react. Label it. Remind yourself that it is only a negative thought. And then move on to something else. Don't get trapped into thinking about it. Dismiss it. Once again…

Negatives only have power over you if you react to them.

Now the third technique for eliminating negatives is to exaggerate the thought into all ridiculousness.

The exaggeration technique is a great technique, but you must exaggerate it into ridiculousness. And the key word here is ridiculousness. Let's say that you're a salesperson and you're out making your sales calls and suddenly the thought comes to you, "Ah, what's the use, I'm not going to make another sale today." And then you catch yourself and you say, "Wait a second that's a negative thought." With the exaggeration technique, what you might then say is, "That's right, I'm not going to make another sale today. In fact, I wouldn't be surprised if, when I visit this next company, as soon as I open the door people are going to be throwing pails of water on me, and then they're going to release pit bull terriers and German shepherds and I'm going to be bitten and I'm going to be wet, and then this great big mechanical boxing glove will come out and it's going to smash me in the face. And then everybody is going to leap up on their desk and reveal this great big banner that says, 'You fool, why did you come here? You're never going to make another sale!' "And you just keep carrying on like this, exaggerating it until your mind goes, "Okay, enough, this is ridiculous." You then find yourself laughing at the thought, and once you're laughing at the thought you have robbed it of all its power.

Wouldn't it be great if when we had negative thoughts they came with warning signs reading, "It's only a negative thought, you don't have to believe it if you don't want to." But negatives don't come like that. They come disguised as apparently real problems, or quietly, slipping in when we're not paying attention. And if we're not aware of the fact that our mind is the great trickster, forever conjuring up negative thoughts, then we'll buy into every single destructive thought that occurs to us. But with these techniques we have ways of dealing with negatives. That's why they are so valuable.

The fourth technique is to counteract the negative with the exact opposite.

Whatever the negative is saying to you, you counteract it by thinking the exact opposite thought. When the negative thought comes to you: "I'm not going to make another sale today," you counteract it with, "I'm going to make several more sales today." When the negative thought comes to you, "I'm never going to get ahead financially," you counteract it with the exact opposite - "I'm going to be tremendously successful financially." When the thought comes to you, "I'm never going to have a meaningful relationship," you counteract it with the exact opposite -"I'm soon going to have a fabulous relationship."

You see, the mind can think only one thought at a time. It might seem to you that you're thinking many thoughts at a time, but what is actually happening is you're thinking one thought after another one thought after another one thought, and so on. At any given moment, you're only thinking one thought. So if you take out the negative and put in the exact opposite, you are taking the power away from that negative. Don't feed the beast.

This is often exactly opposite to what most people do. Most people, when they have something that they don't want to have happen to them, they think about it, they worry about it, they focus on it, eventually they manifest it.

The fifth technique is to use affirmations on the negative.

If you don't know what affirmations are, they are simply statements that you repeat to yourself, over and over and over again. In Mind Power into the 21st Century there is an entire chapter on affirmations. Affirmations are extremely effective, especially on those reoccurring negatives, the ones that have haunted you for years. What you do is the next time that you find yourself thinking that negative, calmly inform it that, "From here on, every time that you come to me, you will be met with two minutes of affirmations stating the precise opposite of what you are saying." And keep to that promise. So when your mind comes up with a negative such as, "I'm never going to get ahead in my life," as soon as that thought comes to you, counteract it with two minutes of affirmations stating the exact opposite: "I'm going to be tremendously successful in my life. I'm going to be tremendously successful in my life. I'm going to be tremendously successful in my life." And repeat this affirmation to yourself over and over again for the full two minutes. And if the negative comes back, hit it again with another two minutes. If you respond with two minutes of affirmations every single time it comes to you, I will guarantee you that very quickly, often within days, that negative will cease haunting you.

These are five excellent ways of dealing with negative thinking. Use whichever ones you find beneficial, use them in combinations with one another, but most importantly, use them. Because you no longer need to be overpowered by negatives. No longer do you have to let these negatives bring you down. From this point on you possess the tools and techniques to eliminate negatives. Congratulations. Now go out and use them.

You can also find out more information on affirmations by going HERE.

Designing a Mind Power Program - Part I

The first thing to be aware of before setting out to create goals using mind power is the importance of doing the exercises regularly, not just when the mood strikes us. As I

always like to point, mind power is a practice not a philosophy. To get the full benefit of this system you must take it into your life and practice it the same way you do brushing your teeth, working out or any other daily practice. Mind power must become a common everyday occurrence that both supports and directs you.

Most people miss this. Most people only scratch the surface of what they can truly achieve because they don't devote daily time to the practice. They do it when they feel like it.

The problem with this approach is that there are a hundred and fifty-seven excellent reasons why not to do the work:

- "I'm too tired today."
- "I'm too busy."
- "I'm not sure if I'm doing it right."
- "It won't matter if I miss a few days."
- "I'm just not into it today."

The list goes on and on, offering all the perfectly persuasive excuses we give ourselves for avoiding the task of doing the exercises.

Interesting enough, John discovered this firsthand when he was living in the woods in British Columbia and putting together his first series of mind power lectures. To see the full effects, he wanted to do the exercises every day for ninety days. The key word was EVERY day. He was getting some sporadic results with the techniques, but he suspected that the really powerful results depended upon a regular practice. But knowing something intellectually, and actually following through on it, are two totally different stages. However, after much procrastination, he set a goal to do the exercises every day for ninety days. He also decided to chart myself by putting a mark on the calendar when he did the exercises, so he could see exactly when he did or did not do them. The marks or lack of marks on the calendar would tell all.

During my first attempts with this process I also discovered the importance of consistent and persistent action. The first week filled with resolve and determination; I did the exercises every day and each day there was a mark on the calendar. The second week the same. The third week I missed one day. The fourth week a couple of days. Then a couple of months later I looked at the calendar and realized I hadn't done any exercises in over a month. How did that happen, I wondered?

So I started again on a daily program, charting myself each day. And again, after about a month, I slipped into not doing the exercises. This starting a program and not finishing it happened four or five times over close to a year period before it dawned on me, "This is not as easy as it appears." Then a burning desire to actually finish one full ninety-day period of doing the mind power exercises every day welled up inside me. I also had new respect for the task!

I knew it would take diligence, commitment, and daily reflection, and that often I would have to do the exercises when I didn't feel like it. This was not a simple task. I had tried it many times before and wasn't able to complete it.

This time I didn't take the task lightly. It became my main focus and, charting myself, I finally finished the first ninety-day program for myself, and the results in my life were spectacular. Not only did I have the enjoyment of seeing my goals come to fruition, I learned a very valuable lesson about doing the exercises, namely it is not easy. This is a point I emphasize to my students again and again. "Don't underestimate the power of your own inertia and bad habits."

The two most common errors when using mind power are: 1) coasting, and 2) not doing the work. Coasting happens after you have done the exercises regularly and consistently and begun manifesting results in your life. The results are so astonishing; things are going so well, that you begin to forget to do the exercises. You begin to coast on your momentum. And coasting on your momentum works...for a while. But before long you notice that things aren't going so well, and you realize it has been weeks or even months since you've regularly done the exercises. Coasting while doing mind powers is a common mistake.

The other common error is simply not doing the work. Reading the Mind Power book every day is not doing mind powers. Telling others about this system is not doing mind powers. Thinking about how great it would be to be proficient at doing mind power is not doing mind power. One thing and one thing only is doing mind power, and that is actually doing the exercises every day, charting yourself so you can put together ninety days in a row.

We call this the ninety-day club. Do you want to join the ninety-day club and completely change your life? Few people do, probably only a small percentage of all my readers. Sure you can still get results doing less, and many do, but the lasting and powerful results I speak of in my books and tapes are reserved for those who have the diligence and persistence to do the exercises daily. So the first lesson in setting up a program is "Do it daily."

Designing a Mind Power Program - Choosing Appropriate Goals - Part II

Is it appropriate to use *Mind Power* to make a lot of money? Absolutely! Is it appropriate to use *Mind Power* to heal ourselves of an illness? Definitely! Is it appropriate to use *Mind Power* to attract a meaningful relationship into our life? Of course! Is it appropriate to use *Mind Power* to enhance our personal status and well being? Yes and yes again. Each of us has been given free will to choose our goals and create our life according to our own unique vision and desire. There are no restrictions placed on what we can do. In the Bible, Christ says "Whatsoever things ye pray for and ask for believing that ye have received it, ye will receive it." I often quote this scripture to my mind power students. I like to emphasize the interesting change of tense within the sentence namely, you must believe you HAVE received it before you WILL receive it. This is exactly what you do

when you visualize. But another word in this sentence also bears reflection, "Whatsoever". "Whatsoever" gives us a lot of options. There seem to be very few restrictions put upon us. Yet there are times that using *Mind Power* is inappropriate. It is inappropriate, for example, to harm another individual or to interfere in another's path. It is also inadvisable to choose goals that go contrary to our deepest instincts. The powers of the mind transcend our mortal understanding and there is very little we cannot manifest when we put our will and imagination to work, so choosing wisely as we create our life is a skill we need to develop.

Choosing appropriate goals means asking ourselves a few questions, '*Who am I?*', '*Where am I going?*', '*Why am I going there?*' Reflecting on these questions and answering them truthfully will reveal a lot to us. Very often in life we find ourselves charging off in different directions that on the surface we feel would benefit us but in reality only side track us from that which would truly satisfy and nourish us.
I once had a student who announced to me that his goal was to be the 'richest man in Canada'. When I questioned him regarding why he wanted to pursue such an ambitious goal he replied "To prove to myself that I can!" On discussing it further it came out that a lack of self-esteem and a need to feel competent and successful were at the root of this choice. Understanding this, he chose a more appropriate goal to help embrace his feelings of worthiness.

The choosing of inappropriate goals happens more often than we realize and not just with other people. So while we may choose any goal our imagination can conceive, not all goals serve us equally. When you begin to understand the fundamentals; who you are, where are you going and why are you going there, you will find that some goals are more appropriate for you than others, according to where you find yourself on your life's path. So how do we know which goals to pursue? Here is where our subconscious mind comes to our assistance. We merely have to trust our instincts and follow our own call. Choose goals that excite you or and make your heart leap for joy. If the concept of "failure" did not exist, what might you want to do with your life? If money was not a factor, which paths would you travel? Allow your imagination to run wild and break loose from the restrictions of "realistic expectations". Keeping a journal about our hopes and dreams can unlock possible paths we might have ignored. Don't be too realistic with your life, be creative. After all, what can't you do, if you truly desire it and align yourself with your inner power?

Choosing goals that embrace our life in a meaningful way is like swimming with the tide and current, it almost carries us with its power. Choosing goals that are inappropriate because we feel that we need to live up to someone else's expectations only serve to side track us. Parents, peers, spouses, society's expectations weigh us down if we let them influence our choices. Throw off the shackles. When we choose goals that match others' expectations, we fight the tide. We're swimming against the current. Life fights us every step along the way. We feel exhausted in the process and are forever asking ourselves, 'Why am I doing this?' For example: a young woman goes to law school because her parents expect her to, rather than following her heart and taking Fine Arts. Using *Mind Power*, she can become a successful lawyer but will she have a happy and fulfilling life?

Each human being carries within them the key to their own success and happiness. It may mirror society's concepts or it may be radically different. No one knows you better than yourself. No one can choose your path. No one gets to walk and experience your life. You are a law and force unto yourself. Follow your instincts; they are within you for a reason. They are signposts to an exciting and fulfilling life.

Being a human being means exercising our free will according to our own vision. Give up this power to no one and choose boldly and courageously with vision and compassion and you will create a life unlike any other. A life tailor made for you.

Designing a Mind Power Program - Part III

In this section I will share how one chooses which techniques to use, and how I personally do my own Mind Power program. Yes, I do practice what I preach.

As I have mentioned many times with my students, consistency is the key in seeing results with Mind Power. It is infinitely better to do twenty minutes EVERY day than an hour twice a week. Daily exercises build up tremendous energy.

Now if you were to do every Mind Power technique shared in the Mind Power Into the 21st Century book for five minutes each you'd probably need an hour and a half a day, and that's far too much time. In our modern, busy, active lives time is precious and needs to be used wisely. That's why I suggest you limit yourself to twenty to thirty minutes a day. This is sufficient time to see dramatic results in a relatively short amount of time, and yet very doable even for the busiest person. You have to work to see results with mind power. This is not a magic wand. Mind Power is a practice not a philosophy and there are very few practices that will guarantee you results from just twenty to thirty minutes a day. So we're fortunate to have it.

I personally like to spend approximately five minutes on each exercise I give myself. So if I devote twenty minutes, that's four exercises daily; thirty minutes lets me do six exercises. I also like to assign myself a weekly program, whereby at the end of each week I review my exercises and change them as it feels appropriate.

Some exercises can be general and others specific. For example, you could have a general exercise on abundant health and a specific one to help with your sore back. Or a general one on an abundance of money and a specific one on closing an important deal with one of your customers.

Designing your own personal mind power program is like painting a canvas. There are a few basic rules of composition and color, but each artist paints in his or her own particular way. The paintings of Picasso and Rembrandt are radically different from one another yet both are recognized as masters of their craft. So too you can be a master of mind power in your own unique way if you have the desire and commitment.
Having personally taught over a hundred thousand individuals this system and reached another million or so with my books, tapes and videos, I have copious firsthand experience with the different ways people use mind power. Each person is different, and

this is one of the wonderful strengths of Mind Power - it will suit your particular style and character. Some people use a diversity of techniques while others use only one or two. I know individuals who have achieved great success using only the affirmation technique and nothing else. While using just one technique would be too restrictive and limiting for me, it worked for them and that's all that counts. I am a big believer in RESULTS!

When you get right down to it, the essence of mind power is to get you vibrating with the energy of the goal you wish to manifest. That's the purpose of all the techniques because what you vibrate you attract. So while it's only natural that you will have your favorite techniques, the mind likes diversity and changing exercises week by week often spurs one on. This you will experience with practice.

Let's assume you've chosen an appropriate goal and you've committed yourself to doing thirty minutes a day for a ninety-day period. This is your contract with yourself. A possible Mind Power scenario might look something like this:

WEEK 1
5 minutes visualizing goal
5 minutes seeding goal
5 minutes affirming goal
10 minutes on subconscious exercises for guidance
5 minutes acknowledging your strengths
After the first week you might decide to change the exercises:

WEEK 2
5 minutes visualizing goal
5 minutes seeding goal
5 minutes affirming goal
5 minutes contemplating the importance of success
5 minute on self-image
5 minutes acknowledging your strengths
Then again at the end of the second week:

WEEK 3
5 minutes visualizing goal
5 minutes imprinting new beliefs
5 minute contemplating your personal power to create
10 minutes on self-image
5 minutes of affirmations

So while the goal remains the same, the exercises can vary week by week. Each of us is a work in progress and our life is our canvas. Every weakness can be changed into a strength, and our strengths can be used to empower ourselves into whatever we choose to become. Mind Power allows us to do this according to our own unique vision and desire.

Another bit of advice: Don't be constantly looking over your shoulder asking yourself, "Is it happening yet?" It's only natural that we want to see results, but asking yourself this question daily or even weekly is self-defeating. Imagine digging up a seed you've recently planted every couple of days to see if it's growing. It would never grow. Allow Mind Power to work in its own time, without interfering. Results WILL happen. The Russian mystic Gurdjieff said, "Don't think of results, just do!" Wise counsel. Limit yourself to asking "Is it working?" once a month and no more. In fact, at the end of each month ask yourself two questions. First, "Have I done my exercises every day?" Secondly, "Am I seeing progress towards my goal?"

If the answer to the first one is "yes" then there is an excellent chance the answer to the second will be yes too. If, however, the answer to the first question is "no", well, you get the idea.

Mastery of Mind Power - Part I

This seems an appropriate subject to begin a new year, a time when we are all filled with new resolve, making a batch of New Year's resolutions about what we are going to do differently, about what we intend to achieve this year.

A calendar year in many ways is illusionary and man made. Actually life just continues on without any noticeable difference. However, the fact that we mark the end of one year and begin a "new" one in our minds is a wonderful catalyst to make changes. It is a great opportunity to let go of what is unsatisfactory and not serving us, and to embrace new habits which will result in new realities for us.

Most of what happens to us depends upon a choice. Our choice of directions, thoughts and actions. If you choose well, and act upon those choices with will and determination, much will happen for you. My suggestion to you this year is that you choose mastery of mind power, that you elevate your understanding and practice to where a higher level of mastery is reached, and so the next few months will be dedicated to showing how every student of mind power can achieve this goal in the coming year, 2004.

First, let me share with you a story. It was 1972 in Munich. A relatively unknown swimmer was poised at the edge of the pool awaiting the firing of the starter gun. It was his first time in the Olympics and he had made it to the finals. The gun sounded and he dove into the pool and swam with all his strength. Moments later he had won the gold medal and set a new world record at the same time. The next day he swam again, and again won another gold medal and, amazingly, he again won it in world record time. He swam seven races in Munich, won seven gold medals and, incredibly, established seven new world records. It was one of the greatest feats in Olympic history. The entire world suddenly knew the name of Mark Spitz.

His winning was not luck or chance, but the end result of all the work he had put into his sport. He had the heart of a champion and the dedication of one who knows what he wants and what he has to do to achieve it. His words call for careful attention from all who wish to excel. "We all love to win," he said, "but how many people love to train?"

This is an important question for those of you who will consider my suggestion that you develop mastery in mind power this year. If you do desire to develop this mastery, and to develop it this year, then you will need to train and exercise just like an athlete. Fortunately you don't need to put in anywhere near the time that an Olympic athlete must commit. All that is required is a 20- to 30-minute commitment daily. But I do mean daily. Mastery will never come from half-hearted attempts and fitful starts and stops. Are you still interested?

I have personally trained over a hundred thousand students. This is not counting the millions who have read my books or listened to my CDs. I'm talking about people I know who have studied with me. Each of them has been different, with unique circumstances and goals. No two people are the same. Yet with each one of them, the method I taught was the same. What works for one, works for all. Every single one of my students saw results. It sounds incredible but it is true. For some the results were modest. For others the results were extraordinary. But none was unhappy with my teaching. Not everyone desired mastery of this inner science. Most were willing to settle for competency. And there is nothing wrong with competency.

To be competent at mind power is a wonderful achievement. Most are thrilled with what competency brings. However, there are always those dedicated few who wish to excel at this science and lift themselves from competency to mastery. What does it take? I will answer in one word, practice.

There is an old expression that states "practice makes perfect." I'm not sure I would agree a hundred percent here. The concept of perfect is illusionary. Practice doesn't make perfect. Practice develops mastery when combined with will and determination.
There are a number of secrets to developing mastery that cover all fields of endeavor, not just mind power. It is these that I will explore here, rather than specific mind power techniques which are explained fully in John's book. Mind Powers.

Part I

"Don't think of results, just do." It was Gurdjieff, the Armenian mystic, who quoted this phrase, and a wise one it is. In Mind Power, results always follow practice. It is the practicing of the techniques that causes the results to happen. A simple enough concept to understand, yet often forgotten. Mind Power students often wonder, "When are my results coming?" after doing the exercises for just a week or two. Sometimes students are looking for results after only a day or two, and slack off from their exercises when they don't see immediate results. It is the nature of our "I want it now" culture that demands and expects immediate results. We get it from the fast food we eat, to sitting in front of the TV flicking the channels till we find something we like. We feel uncomfortable and unnatural waiting for something to happen. That is why Gurdjieff's saying is so powerful today, more than fifty years after his death.

"Don't think of results, just do." What? Don't think of results? But results are what I want. Yes, but it is the thinking of results, the watching and waiting and anticipating them that distracts us from the practice. "Just do," he says. Do what? Do the exercises.

Concern yourself only with the practice. Think only of doing the exercises daily. If you can focus on the practice and the daily doing of your exercises, results always follow. In my classes I often express this truth in a slightly different way. Those who have been my students know that I emphasize time and time again the importance of "not constantly looking over your shoulder." What does that mean? It means that it is counterproductive to be asking yourself daily "Has it happened yet?" "Am I getting results?" Now Mind Power is result oriented, and you must know whether what you are doing is producing results, but you don't need to monitor it daily, or even weekly. Once a month is more than enough to examine your results. So each day you don't monitor results, you monitor only whether or not you're doing your exercises. Your only concern is "Have I done my Mind Power exercises today?" If you have, fine. If not – do them immediately. No procrastination. Set up a mind power program and commit to it and do it daily.
This is the first lesson of Mastery, and a very appropriate one to begin with.

Mastery of Mind Power - Part II

Can you see yourself as a master of mind power? For some it will seem an exciting challenge. For others, an unattainable goal, far beyond their grasp. But mastery of Mind Power is more accessible than you might think. It is not reserved for those who are super talented or willing to put in long hours of practice every day. It is well within the realm of possibility for any person of average intelligence who is willing to practice twenty minutes a day. That's all. Twenty minutes.

Mastery involves getting on the path and staying on the path regardless of what is happening in one's outer life. It is a dedication to an ideal, a matter of creating within to reap the rewards without. It is learning to love the practice as much as you love the results. Now we all love results and it is the desire to manifest results that prompts a person to first experiment with Mind Power. But to those who embark upon the path of mastery, the practice becomes an end in itself. When one regularly practices, one feels alive with positivism and expectation. One's whole being seems magnified and charged in a way that would seem unfathomable to those who have never attained such a level. Those who practice Mind Power for a week or two often get a taste of this feeling. But after the initial exhilaration and excitement, they often get sidetracked and let it slip. I know this because I've taught Mind Power for twenty-five years, and seen what some masters call "the quite common but inexcusable human inertia."

Mastery involves dedication to an ideal, and that ideal is not success but rather a love of the practice. You learn to love the practice through the daily repetition of exercises. The practice becomes satisfying and fulfilling in and of itself. And here I will share with you a secret that is known to all those who regularly practice any discipline. There is something almost magical that happens within the psyche of anyone who regularly practices any discipline. The discipline itself doesn't matter; it is the regular routine and commitment to a practice, whether it be weights, running, Tai Chi, dancing or meditation that activates a source of power that uplifts and benefits the individual. The daily routine, the commitment, the dedication, the persistence magnifies and enhances all aspects of your life. Your health, your awareness, your insights, your ideas, your ability to make

decisions are all enhanced. Incredible but true, and these benefits are available to every individual.

Now let me tell you about the added benefits of regularly practicing Mind Power. Firstly, of course, you get the benefits that I just spoke about from doing a regular practice. But with Mind Power you get the extra benefits of manifesting and creating your life in ways that you choose. Mind Power is a practice that pays double and triple dividends. If you were to choose only one practice in your life, let it be Mind Power. Of course I'm prejudiced and love this practice, but I stand by what I say. This practice produces amazing results.
Do I have you convinced? Are you ready to become a Master of Mind Power? Some might say, "I don't necessarily want to become a Master of Mind Power; I just want to practice it regularly." Well, here's the second secret I'm going to share with you. Practice it regularly and you will become a Master. Proper instruction and regular practice is all that is required.

Watch your excuses for not practicing. I share with my students that there are 157 excellent good reasons why not to do the exercises. Too busy, too tired, not motivated, not sure if it works, not sure if I'm doing it correctly, not feeling well tonight, etc., etc., etc. Mastery of Mind Power really means mastery of practice and mastery of practice means ignoring and moving past all the excuses and reasons we give ourselves for not doing something. That is why I challenge my students to join the ninety-day club. Ninety days of doing the exercises every day. Ninety days of dedication to mastery. Ninety days of no excuses. I should rephrase that last sentence. There will always be excuses and reasons, and many of them quite logical, but you listen to them and then choose to ignore what they are telling you. Why? Because you're dedicated to mastery. You're dedicated to joining the ninety-day club and there is only one way you can join. By doing the exercises every day without missing a day for ninety days.

Now my third secret: The subconscious responds well to repetition, and it is the daily repetition that causes the imprint to take hold on a subconscious level. Sometimes this can happen in weeks (rarely does it happen in days, and that is why dabblers in the science rarely see results), sometimes in months, but almost always it will be imprinted in a three-month period. The second reason I have picked the figure ninety days is that new habits need time to take hold, and old habits are resistant to change. However, ninety days is a long enough period to change a negative habit into a positive one.

Now some might ask, "Will ninety days make me a Master of Mind Power?" The short and simple answer is no. But it will put you well on the path, and hopefully you will have begun to feel the benefits of the practice.

Mastery of Mind Power will take years, but benefits and success start happening immediately. Your first ninety days should reap many rewards for you. Then, after the first ninety days, challenge yourself to a second, and then a third. I think you get the message. As I quoted last month, "Don't think of results, just do."
Love the practice and do it regularly; mastery will follow automatically.

Again, to find out more about John and Mind Power you get his book HERE

In addition to John's information I have found the following to be extremely beneficial in changing my mindset and creating all the results I want.

Affirmware:
Is an advanced technology that enables you to manifest everything you want through the results-amplifying use of *computerization?* This information is not available anywhere else on the Web -- or the world, for that matter. So I urge you to read every word of the website because the secret that can single-handedly turn your desires into reality is hidden in this web page -- and I don't want you to miss it. Additional information can be found HERE.

Intelligent Warrior Subliminal Video Messages:
This is the exciting Message Series that is revolutionizing the Subliminal Message industry. Everyone from major corporations to top sales people and aggressive professionals have secretly used these videos in extensive Beta testing with PROVEN, IMMEDIATE RESULTS! For more info please go HERE

Centerpointe:
The most powerful personal growth and mind development tool in Earth! Request a free demo CD by going HERE

2.) Strength Training

Warm Up Sets

- When only one number appears in the warm-up (WU) column a weight approximately 50 - 60% of the weight you intend using in the work sets is to be used at the number of reps indicated.
- When two numbers appear in the warm-up (WU) column the first set of reps are to be performed at a weight of approximately 40% of the intended work weight and the second set at approximately 70% of the intended work weight.
- When three numbers appear in the warm-up column (WU) they are to be performed at approximately 40% (first WU set), 60% (second WU set) and 80% (third WU set) of the intended work weight.
- If a warm down set is indicated it is to be performed with a weight that allows you to achieve the reps indicated but with great difficulty - it is in many ways another work set.

Rest Periods

- Note that the rest periods may change from stage to stage.
- Use only the full rest period if required - ensure full recovery prior to starting next set.
- The rest period indicated does not need to be taken in full between warm up sets.

- If there is a great discrepancy between the rest period indicated and the rest period you feel you need, there may be a problem with your training approach - consult your instructor.
- At the end of each program it is advisable to delete strength training from your total training schedule for half to one week prior to the commencement of your next program.

Weight Selection

- Select a weight in the first week that allows you perform the prescribed sets and reps with correct technique.
- Increase the weights in small increments each week on every exercise if possible.
- If you remain on the same weight and reps for more than two consecutive weeks, there may be a problem in your weight selection, which requires modifying - see your instructor.
- Never sacrifice correct technique or safety in an attempt to lift heavier weight - each person has a technique limit on each of their exercises which if they exceed they will not be able to perform the exercise in the prescribed manner.

Speed of Movement (Tempo)

- If speed indicators are given, the first number refers to the lowering (eccentric phase) speed in seconds, the middle (second) number to the duration of the pause in seconds, and the last number (third) to the duration of the lifting (concentric phase) in seconds. e.g. 8:0:4 = 8 second lowering time, no pause, and 4 second lifting time. The letter X refers to eXplode – move the weight as fast as possible.
- The majority of movements are performed with a controlled lowering, pause, and then an explosive lift - unless otherwise indicated, think "quick" and try to lift "quickly", with speed.
- The warm-ups reps are in most instances to be performed at a normal speed i.e. 3:1:1.
- Olympic-type movements, emphasis should be placed on the speed of the movement, rather than the amount lifted.

Safety and Spotting

- When the bar is above the body e.g. in the bench press, do not hesitate to use a spotter in the event that you cannot complete the movement.
- Minimize the use of 'assisted reps' i.e. where your spotter helps you up and then you continue to lower the bar again, he helps you up, etc. IF YOU CAN NO LONGER DO THE MOVEMENT BY YOURSELF - DO NOT COMMENCE ANOTHER REP

Abbreviations

General

Single one limb at a time i.e. one leg or arm at a time (unilaterally)

BW Body weight
BD Bench dips
DB Dumbbell
LPD Lat Pull down
TPD Triceps press down

Foot Positions (e.g. in squat)

WS Wide stance
MS Medium stance
NS Narrow stance

Foot Positions (e.g. in the bench press)

FA
FB
FD

Feet in air
Feet on bench Feet down on ground

Hand Positions (e.g. in bench press, shoulder press, bent over row, etc.)

WG Wide grip
MG Medium grip
NG Narrow grip
RG Reverse grip

Bar Positions (e.g. in squat, bench press, bent over row, etc.

HB High bar
MB Medium bar
LB Low bar
BN Behind neck
FN Front neck

Training Methods

[]	Alternate the two exercises showing this sign, using full recovery
{}	Superset the two exercises showing this sign i.e. using no recovery between a set of each, recover, then repeat a set of each with no recovery, recover etc.
A1, A2 etc:	Perform one set of the first exercise, followed by one set of the second exercise before moving on to the next series (B1 etc). Pay attention to the

specified rest periods.

AMRAP: As many reps as possible – with good technique.

Olympic Lifts

HA	Hang above (start just above the knee)
HB	Hang below (start just below the knee)
OB	Start with weights resting on blocks i.e. high shin level
SOB	Starts with you standing on the block i.e. bar lower to ground (in relation to feet) than normal

If the following words appear in front of the words clean or snatch, they indicate the following:

MUSCLE: Accelerate the bar into the catch position with minimal bending of the knees e.g. 'muscle snatch'

POWER: Accelerate the bar into the catch position including a bending of the knees to 'catch' the bar, with the bending not exceeding a position where the thighs are parallel to the ground e.g. 'power snatch'

NB. If the word power is not placed before the word clean or snatch, it indicates that that exercise (i.e. the snatch of clean) is to be performed with catching of the bar at a knee angle lower than thigh parallel to the ground i.e. in a deep squat position e.g. 'clean' or 'snatch'.

Where equipment is not available to do any of the exercises prescribed above replace with exercises that utilize the same muscle groups in the same line of movement.

NB: THE MOST IMPORTANT ASPECT OF YOUR OFF FIELD TRAINING IS TO ENSURE USE OF CORRECT TECHNIQUE - THIS WILL RESULT IN GREATER TRANSFER TO YOUR SPECIFIC SPORT AND AVOID INJURIES - NO INJURIES!

20 Home Gym Workouts for Ultimate Strength, Power & Endurance.

Having built (or started to build) your home gym from the free report you received from www.WarriorFitnessTraining.com you are probably wondering what sort of workouts to do with equipment such as sandbags, kegs, rocks and tires

SIDE NOTE: I've recently partnered up with other trainers to provide a sight with basically unlimited workouts. If you always want to stay on top of your game and be in the best shape of your life….forever, you've got to check this site out HERE

I know, once you check it out you'll be amazed at how much info, inspiration and motivation is there….can't wait any longer can you??? Go ahead and check it out HERE

In this section of your Warrior Fitness Training – Home Workout book we'll cover just a few of the thousands of workouts you can do in your home gym.

Home Gym Workouts

If you've got a few basics bits of equipment you can put together an unlimited variety of workouts to develop your speed, strength and endurance and burn fat.

For each of the workouts listed keep in mind that you can always increase or decrease the reps, rounds, time or load to adjust the difficulty for your current level of fitness.

Also the prescribed set and rep schemes from one workout can in many cases be used with other groups of exercises to create completely new workouts!

Thanks to www.crossfit.com for the inspiration for many of these workouts.

>>>SAFETY<<<
A note of caution about odd object lifting.

When you first start lifting rocks, sandbags and other odd objects, reduce the weights used substantially compared to your barbell workouts. If you can get a 100kg barbell overhead you may be surprised to find that a 65kg rock stops you cold, so err on the side of caution; after all you can always get a bigger rock!

Rocks

Workout 1

Get yourself a medium weight rock (30-50% of your bodyweight should do)

Complete 5-10 rounds of the following in the minimum possible time.

5	Bent over rows
10	Clean and push press
50m	Zercher or bear hug carry the rock

Make sure you do this on grass!

Workout 2

Complete the following as quickly as possible

21 Rock front squat to overhead press
21 Pushups
21 Sit ups

15 Front squats to overhead press 15
Pushups
15 Sit ups

9 Front squats to overhead press 9
Pushups
9 Sit ups

Tire

Tire flip

Workout 3

As many rounds as possible in 20 minutes of

5 Tire flips
10 Jumps on to the tire
15 Pushups with feet elevated on the tire

Workout 4

5 rounds in minimum time of

5 Flips
10 Kettlebell snatches each side
20 Sledge smashes each side

Workout 5

Tabata sledge smashes

Tabata is 20 seconds working as hard as you can followed by 10 seconds of rest repeated 8 times for a total of 4 minutes.

Sandbag

Sandbag get up

Workout 6 – Strength combo circuit

5 rounds of

5	Shoulder + lunge each side
5	Deadlift + bent over row
5	Clean and press
5	Weighted pull-ups

Workout 7 – Core and Cardio Killer

As many rounds as possible in 20 minutes

5	Sandbag get ups
10	Clean + zercher squat
100 - 200m	Carry

Medicine Ball

Rotation Throw

Workout 8

3 Rounds as quickly as possible

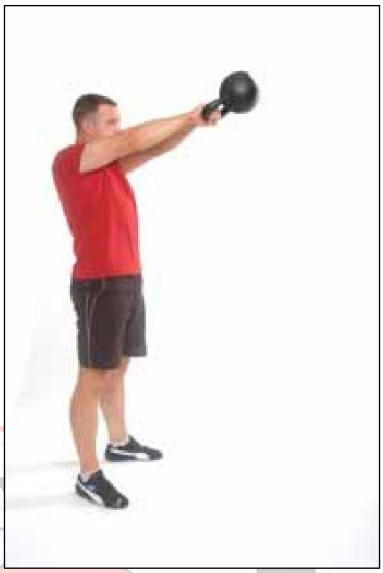
10	Rotation throws each side
20	Pushups – feet balanced on med ball
30	Front squat to overhead throw against a wall (wall ball)
400m	Run

Workout 9

Complete in minimum time

50	Ball throw down slams
50	lunge steps holding med ball overhead
25+25	Pushups one hand on the ball (25 left, 25 right)
50	Wall ball throws
50	Sit-ups, medicine ball held vertically above head
50	Med ball burpees

Kettlebell



Workout 10

US Secret Service Snatch test

In 10:00 complete as many one arm kettlebell snatches as possible. Men use a 24kg kettlebell, ladies a 12. Arm switches and resting are permitted

Workout 11

In minimum time

100 swings
Run 2000m
100 swings

Workout 12

In minimum time

100 swings
100 pushups
100 setups
50 burpees

Barbell

Snatch Pull

Workout 13

5x5	Clean and Push Press Back squat
5x5	Power Snatch
5x5	Dead lift
5x5	

Workout 14

5x3	Floor press
5x3	Snatch pull + Snatch Dead lift
5x3	Clean + 2 Front squats

Heavy Bag

Workout 15

Complete 1 minute of each of the following exercises, move between exercises without a break and after all 5 exercises take a 1 minute break between rounds.

1 minute	Straddle bag – hooks
1 minute	Flipping bag end over end
1 minute	Bear hug pickups
1 minute	jumping over the bag from side to side
1 minute	Pushups, feet on bag

Set up on grass to avoid damaging bag.

Workout 16

8 rounds of

5	Bag shoulders + squat each side
15	Sit-ups
50m	Shoulder or fireman's carry

Sled

Workout 17

Set up a 50m out and back drag course

Start harnessed into the sled and complete

15 Kettlebell swings or barbell front squats, drop weight and sprint out and back. Pick up a sandbag and run the drag course twice.
Finish with a max set of pull-ups or pushups.

Complete 3-5 rounds with a 2 minute break between rounds

Workout 18

Find a big hill

Drag the sled up the hill alternating between 10 steps walking forward, 10 steps walking backward and 10 steps side stepping left and right.

Make sure it's a BIG hill.

Combo Workouts

Workout 19

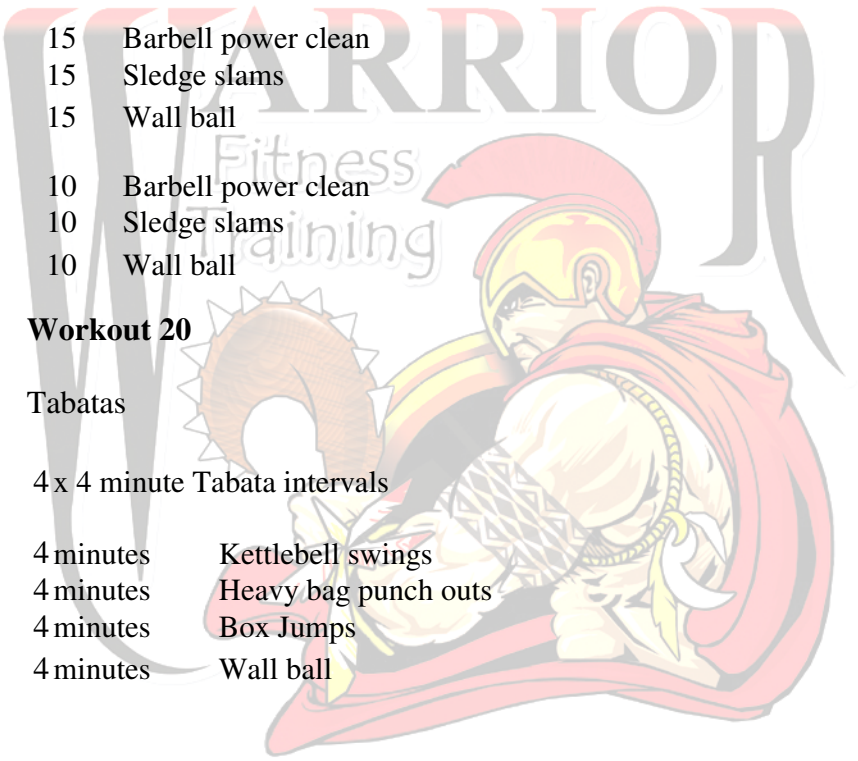
25	Barbell power clean
25	Sledge slams
25	Wall ball
20	Barbell power clean
20	Sledge slams
20	Wall ball
15	Barbell power clean
15	Sledge slams
15	Wall ball
10	Barbell power clean
10	Sledge slams
10	Wall ball

Workout 20

Tabatas

4 x 4 minute Tabata intervals

4 minutes	Kettlebell swings
4 minutes	Heavy bag punch outs
4 minutes	Box Jumps
4 minutes	Wall ball



Postural Assessment and Checks

If your posture is “off” and you continue to workout with correction, you’ll not only risk the chances of serious injuries, but your overall results will suffer as well.

Following a several different postural assessment and checks, take a look at them, then have a friend review your stance, or use a full length mirror.

For these tests, you'll need to stand in front of a full length mirror or have a partner examine you. Close your eyes, take a few breaths and "shake" all the tension from your body. When you feel totally relaxed, open your eyes and remain perfectly still. Examine your reflection but don't attempt to "correct" any postural problems - just note them. You might find it easier to first make several straight lines - horizontal lines and one full length vertical line on the mirror surface with tape, soap, or other easy-to-clean substance. Compare the "line" of your body to these lines and determine if you are parallel to the mirror lines, or if you are out of balance. Mark the appropriate box for each test.

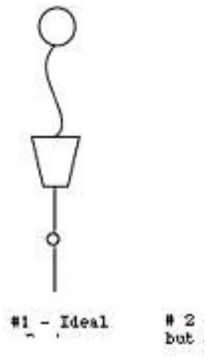
- Midline - draw an imaginary line vertically through your body, from the top of your head, through your nose, chin, belly button and down to your feet. Is this line parallel to the vertical line on the mirror or is it out of balance?
- Ears - draw an imaginary line horizontally through your ears. Is it horizontal like the line on the mirror or is it out of balance?
- Shoulders - draw an imaginary line across your shoulders. Is it horizontal like the line on the mirror or is it out of balance?
- Hips - draw an imaginary line through your hips. Is it horizontal like the line on the mirror or is it out of balance?

The Postural Analysis: Side Posture

Essentially, we're looking for straight lines and 90-degree angles. Let’s start with your side photos. You should be able to draw a straight line between the middle of your foot and take it up through the knee, hip, acromion process (the "bump" where your superior scapula meets the clavicle), and mastoid process (the nub just behind your ear); ideally, this line is also perpendicular to the ground.

Below are the four most common side postures seen. Figure #1 depicts an anatomically ideal posture, whereas Figure #2 shows a posture with the same ideal spinal curves but excessive anterior weight-bearing (i.e. the weight is on the toes). In Figure #3, the anterior tilt has a semi-normal lumbar curve, but compensatory exaggerated kyphosis in the upper back.

Figure #4 is the "Caveman Look" to which we've been referring. It's highly prevalent in today's society; can't you just picture a computer screen right in front of that poor stickman with the club? In this fourth figure, you'll notice the exaggeration of the spinal curves, coupled with the compensations that manifest themselves throughout the rest of the body (excessive lordosis, excessive kyphosis and a head forward posture).



Now before you go on, take out a blank sheet of paper and make six columns at the top. The columns will be labeled as follows:

- Excessive lordosis (includes anterior pelvic tilt)
- Excessive kyphosis
- Internally rotated humeri (yes, that really is the plural of "humerus")
- Forward head posture
- Internally rotated femurs
- Externally rotated feet

Here's a checklist of things to examine on your side-posture analysis, starting from the ground up:

1. Can you make a straight line between your feet, knees, hips, acromion process, and mastoid process? If so, is this line perpendicular to the ground? If you answered "yes" to both questions here, you're doing far better than most! You should still check to see if there's any exaggerated kyphosis or lordosis, however.

2. Examine your knees. Do they have a slight bend or are they locked? If they're flexed, give yourself a check in the internally rotated femurs and externally rotated feet columns.

3. Check out your skivvies. Is the waistband parallel to the ground or is the front pointed towards the floor? If it points down, give yourself a check in the lordosis column. If you see "skid marks," however, change your shorts.

4. Examine your lower back. Is there a minimal curve or is it exaggerated? (This one is more subjective, but chances are if you have an anterior pelvic tilt you also have an exaggerated lumbar curve). If it's exaggerated, give yourself a check in the lordosis column.

5. Examine your arms. Are they carried alongside or in front of the body? (Be sure to look at each side independently; sometimes one side is tighter than the other). If they're in front, give yourself a check in the internally rotated humeri column. If your knuckles are dragging the ground, give yourself a check in the "needs a full body wax" column.

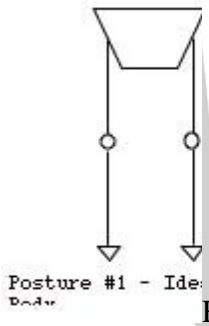
6. Examine your upper back. Are your shoulders rounded forward? If "yes," give yourself a check in the internally rotated humeri column.

7. Can you see any of your upper back? If "yes," give yourself a check in the kyphosis column.

8. Finally, examine your head position. Can you draw a line straight up from the acromion process of your scapula to the mastoid process (anterior portion)? Or, is there a noticeable angle? If you answered "no" to the first question and "yes" to the second, put a check in the forward head posture column.

Front Posture

Now, let's move on to our front photos. We'll be examining not only the position of the legs, but of the arms and hands as well. Below we have the two most common lower body postures: #1 represents our ideal and #2 the more common knock-knee or valgus position (imagine the kneecaps practically facing one another).



Here's a checklist of things to examine on your front posture analysis, starting from the ground up:

1. Can you make straight lines between your feet, knees, and hips? If you answered "yes" here, awesome! Go through the last couple of steps just to make sure everything else is okay.

2. Do your feet have arches or are they flat (excessively pronated)? If they're flat, give yourself a check in the externally rotated feet column, and possibly one in the internally rotated femur column (correlate with #4).

3. From your knees down, do your lower legs and feet turn out? If "yes," put a checkmark in the externally rotated feet column.

4. From your hips to your knees, do your legs turn in and the kneecaps point inward? If "yes," put a check in the internally rotated femurs column.

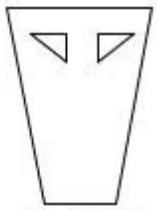
5. Finally, examine the backs of your hands in the photo. Are they turned out to the sides or are they internally rotated and facing the camera? If they're facing the camera, put a check in the internally rotated humeri and kyphosis columns.

Back Posture

Finally, let's take a look at the photos of your back. This is usually the quickest test to

perform because you've already examined the majority of the body. The most important thing we're looking at is the position of your scapulae.

Figure #1 shows us the ideal posture for our scapulae; the medial, inferior borders are both retracted and depressed. Figure #2 is an example of scapular winging, where the scapulae are "pulled" up and to the outside. Finally, Figure #3 shows us a classic example of someone with overactive/hypertonic upper traps coupled with weak and inhibited middle/lower traps.



#1 - Ideal Scapula Position

Here's our back posture view and what we need to examine. As a note, make sure to examine both sides in unison, as well as each side independently. For example, many people only have scapular winging or elevation on one side (typically their dominant one), so be sure to look for imbalances side-to-side as well.

1. Do the medial, inferior borders of the scapulae remain down and back (somewhat close together), or do they "wing out?" If "yes" on the second question, put checkmarks in the internally rotated humeri and kyphosis columns.

2. Do the superior scapular borders point upward or do they seem to "disappear" and point forward (anterior tilt)? If "yes" on the second question, put a check in the kyphosis column.

Now that you've completed the postural analysis, add up how many checkmarks you have in each column. This is pretty simple stuff; the more checks you have under each column, the more signs you have of that specific postural condition!

Additional Tests

If the results of the postural analysis haven't already given you a pretty good idea of which postural afflictions you're battling, we have a few more tests that can help to answer any remaining questions you might have. Some of these tests require a partner.

Yardstick Test

You should be able to rest a yardstick across the clavicular portion of your pectoralis major without it touching the head of your humerus on either side. If the yardstick makes contact with your humeral heads first, you're dealing with internally rotated humeri and probably kyphosis.

Doorway Test

When you enter a room, which passes through the door first: the chest or head? If it's the head, you're dealing with forward head posture.

Squat Test

This is an easy test that assesses the functional capacity of the lower body. Start with the

feet at shoulder-width, toes pointing straight forward, and your arms held in front of the body. From here, perform a full squat (and yes, your thighs have to be *at least* parallel to the ground!) Look in the mirror if necessary; do any of the following occur?

- Do your heels lift? If yes, you have tight plantar flexors and/or poor posterior chain strength (especially glutes).
- Is there excessive arching of the low back? If so, it's indicative of overactive hip flexors.
- Do your knees come closer together at any point during the movement? If so, you have poor glute medius recruitment/strength, and this is probably coupled with tightness and overactivity of the TFL/ITB and adductor complex.
- Do the arches in your feet completely collapse at any point during the movement? If so, you have externally rotated feet and/or internally rotated femurs.

Hip Extension Test

Another test that's quite revealing is the hip extension test. This test will give you an idea of how your lower extremity is functioning, along with other muscle groups that may be trying to substitute for the prime movers.

Lay prone on a table or bed with the ankles hanging just off the end. From this position and keeping the leg straight, lift the leg up several inches. You'll probably need someone to monitor you, but here are a few things they should be looking for:

- Is there a deepening of your lumbar curve when you initiate the movement? This deepening indicates tightness of the lumbar erectors and hip flexors.
- Does the leg stay straight or does it bend at the knee? Flexion at the knee (especially in the first 10-20 degrees of movement) indicates overactive hamstrings. This is usually coupled with the next question…
- Do the glutes fire immediately or is there a delay from the onset of movement? If they're delayed, your glutes are inhibited and/or weak.

Trunk Curl Test

This is just a basic sit-up test, but the results will give you an idea of how your trunk flexors and hip flexors are working. Lay on a table or the ground in a supine position with a slight bend in the knees. Place the arms out in front of the body and then curl-up *slowly*. Have your partner notify you if he or she sees any of the following:

- Are you unable to get your shoulder blades off the ground? This indicates weakness in the trunk flexors.
- Do you have to "rock" to get your body going (e.g. do you use body English to initiate the movement?) Again, this is indicative of weakness of the trunk flexors.
- Is there a deepening of the lordosis throughout the course of movement? If so, you have overactive/hypertonic lumbar erectors and/or hip flexors.

- Finally, do the heels rise or come up off the ground? Once again, this indicates overactive hip flexors.

Conclusion

If you took a close look at your photos and used the above tests, you're guaranteed to have some insight into how good (or bad) your posture really is. Next week, we'll show you how us anatomy enthusiasts (read: dorks!) apply these analyses to real-world situations.

I'd like to thank Eric Cressey, BS, CSCS, Mike Robertson, M.S., C.S.C.S., U.S.A.W and Testosterone, LLC for much of this awesome information!

3.) Flexibility Training

SUGGESTIONS FOR IMPROVEMENT

Improvements in flexibility may result from any or a combination of the following types of stretching exercises:

- Static
- Dynamic
- PNF (proprioneuromuscular facilitation)

These stretches can be performed individually or with a partner. The most important issue in flexibility training may be total duration i.e. how much time do you spend in the stretch. See the attached table for suggestions as to frequency, duration, number of repeats etc.

To achieve the best result in flexibility training it is more than simply putting in the hours. Using some of the "Keys to Stretching" listed below may enhance your training results.

Keys to successful stretching

- *Warm up first:* look to break a sweat prior to stretching - it will increase the pliability of the connective tissue

- *Focus:* stretching to improve length of connective tissue should be treated the same as any other type of training where improvement is the goal. Would you hold an irrelevant conversation with a friend whilst performing skill training with a specialist coach? Give stretching your complete attention during these stretching sessions. Also select a venue where you will minimize the distractions.

- *Relax:* relaxing is a critical component in static stretching where the goal is to *improve* the length of the connective tissue. If you go too far into the earlier repeats, you will not be able to relax. As a rule, do not attempt to progress to the next level of range until you have achieved a relaxed state in the position you are in.

- *Breathing:* you can control your breathing to facilitate relaxing. During the *exhalation* or breathing out phase, focus on relaxing the body.

- *Work at your level:* don't try to achieve the same apparent range as another person; work at a level appropriate for your self and look to improve on it

- *Progress in level of intensity with each repeat:* when performing the first repeat of *any* stretch, work within a comfortable range; in the second repeat, look to move further; and again in the third repeat, look to go further. If doing three repeats, only the third repeat should be challenging i.e. a mild to moderate degree of discomfort. If doing five repeats, the fourth and fifth repeat would be likewise.

- *Avoid inappropriate pain:* It is important to recognize that not all the stretching *exercises* will suit everyone and that even with one individual, circumstances change. A simple guideline that can be stressed is that if it causes inappropriate discomfort, look for an alternative. Learn to recognize between a mild to moderate stretching sensation and higher-level pain, and avoid the latter.

- *Do not compromise the correct technique: Whilst* every different position has a *specific* stretch response, many of the stretching exercises are taught initially in the most effective position from a general standpoint. e.g. the position of the hips in the hamstring and quadriceps exercises. Remember it is the degree of stretch obtained that is important, not how far you appear to have stretched.

- *Tighter side first:* if you identify that one side of your body is tighter that the other, *perform* this side first. This ensures that the tight side is prioritized.

- *Ballistic stretching after static stretching:* static stretching is very effective in *improving* the length of the connective tissue. However there is a place for ballistic or dynamic stretching, especially in sports where the limbs are involved in high-speed movements at end of range. Ballistic stretching may be required prior to training or competition, and may best be performed after some static stretching.

- *Good communication between partners in paired stretching:* especially when PNF *techniques* are used.

Flexibility Variables

VARIABLES	TYPES OF STRETCHING		
	REHABILITATION (Light)	TRAINING/COMPETITION PREPARATION (Medium)	INJURY PREVENT (Heavy)

Frequency	Daily	Prior to training or competition	1-3/wk (influenced by training load)
Total Duration	5-10 mins	10-30 mins	30-90 mins (influenced by training load)
Repeats (per exercise)	1-5	2-4	3-6
Duration of Repeats	30 sec - 5 mins	10-30 secs	30 sec - 10 mins
Number of Exercises	1-4	6-12	8-20
Comments	Insert in daily routine to avoid missing	Do prior to or following training	Select a comfortable location with no distractions, relax

WARRIOR
Fitness
Training

Some Stretching Exercises Described

Muscle Group	No	Description
Calf	1	heel on ground, leg straight
	2	heel on ground, knee bent
Hamstring	3	on back, leg up & straight, toe down (use towel)
	4	on back, leg up, knee bent, pull behind heel
	5	on back, knee to chest, pull behind heel
Lower back	6	on back, both knees to chest, grasp under knee joint
	7	on back, legs straight over the top, grab and pull toes down
	8	on back, trying to touch knees to carpet outside ears
Quadriceps/hip flexor	9	side lying, heel to bum
	10	seated, both legs bent, leaning back
	11	kneeling, pelvic tilt
	12	kneeling, pelvic tilt and/or back foot up
	13	kneeling, move lead leg forward, lower pelvis, head up
Gluteals	14	on back, foot on other knee, push knee away
	15	on back, foot on other knee, hand through the hole
	16	on tummy, knee under chest
Groin	17	seated, soles of feet together, push down on thighs just above knee
	18	seated, soles of feet together, pull head to toes, holding toes
	19	seated, legs spilt, chest up, lean forward to ground
Posterior Chain	20	lie on back, arms out at 90 degrees, leg straight over the top and to the side
	21	lie on back, arms out at 90 degrees, knee bent over the top and to the side
	22	seated, one foot over the other leg, rotate
Slump	23	seated, chin on chest, pull toes up
	24	seated, reaching for toes
	25	seated, one leg up, reaching for outside opposite foot
Neck	26	to the side
	27	to the front, chin on chest
	28	chin in, head straight
Shoulder	29	standing, arm up and over shoulder
	30	standing, arm across chest
	31	standing, arm up behind body
Lats/Chest	32	hang from chin up bar, partially supported, both arms, medium grip
	33	hang from chin up bar, partially supported, one arm
	34	hand parallel to ground, holding onto a vertical bar , rotate away
Forearm	35	standing, arm straight, pull palm down with other hand
	36	standing, arm straight, pull palm up with other hand

The following information is curtsey of The Stretching Institute.

Stretching ...Why Should I?

This short article looks at some of the tips, tricks and helpful hints you can use to help prevent sports injury. It's been put together to answer some of the more common questions we get regarding stretching and sports injury, and details a number of useful sports injury prevention techniques. I hope it proves useful to you.

Overcoming & Preventing Sports Injury

If you're involved in the health & fitness industry, whether it be participating in your favorite sport, coaching, training or just keeping fit, you'll know how annoying and debilitating a sports injury can be. In reality, when you have a sports injury you're actually losing on two fronts. Firstly, you're losing simply because your body has been hurt and now needs time and care to repair itself. And on top of this, you're also losing the time you could have been putting into training and improving your sporting ability.

A sports injury is a bit like losing money. Not only do you lose whatever you were going to buy with that money, but you also have to work hard to make up the money you've lost. Take it from me, a sports injury is one of the most frustrating and debilitating occurrences that can happen to anyone who's serious about their health, fitness, sport or exercise.

The Cold, Hard Facts

I recently read an article titled "Managing Sports Injuries" where the author estimated that over 27,000 American's sprain their ankle every day. (and, no, that's not a typo, EVERY DAY) On top of this, Sports Medicine Australia estimates that 1 in every 17 participants of sport and exercise are injured playing their favorite sport. This figure is even higher for contact sports like Football and Gridiron. However, the truly disturbing fact is that up to 50 percent of these injuries may have been prevented.

The Professionals Secret Weapon

While there are a number of basic preventative measures that will assist in the prevention of sports injury, there is one technique that has slowly been gaining in popularity. It's still not used as often as it should be by the average sports participant, but with the professionals using it more and more, it's only a matter of time before it starts to catch on. Before we dive into this little used technique for minimizing your likelihood of sports injury, let's take a quick look at some other techniques to help you prevent sports injury.

So, Where Do You Start?

Most people are coming to understand both the importance and the benefits of a good warm-up. A correct warm-up will help to raise body temperature, increase blood flow and promote oxygen supply to the muscles. It will also help to prepare the mind, body, muscles and joints for the physical activity to come.

While warming-up is important, a good cool-down also plays a vital role in helping to prevent sports injury. How? A good cool-down will prevent blood from pooling in your limbs. It will also prevent waste products, such as lactic acid, building up in your muscles. Not only that, a good cool-down will help your muscles and tendons to relax and loosen, stopping them from becoming stiff and tight.

While preventative measures such as warming-up and cooling-down play a vital role in minimizing the likelihood of sports injury, other techniques such as obeying the rules, using protective equipment and plain common sense are all useful.

The One Technique to Cut Your Chance of Injury by More Than Half

So what is this magic technique? Why is it such a secret? And how come you haven't heard of it before? Well chances are you have, and also, it's not that secret and it's definitely not magic. You've probably used this technique yourself at some point or at

least seen others using it. But the real question is, how dedicated have you been to making this technique a consistent part of your athletic preparation?

What is it? STRETCHING. Yes, stretching. The simple technique of stretching can play an imperative role in helping you to prevent the occurrence of sports injury. Unfortunately stretching is one area of athletic preparation often neglected. Do not underestimate its benefits. Don't make the mistake of thinking that something as simple as stretching won't be effective. Stretching is a vital part of any exercise program and should be looked upon as being as important as any other part of your health and fitness.

In recent time the professionals have been getting more and more serious about stretching and ultimately, their flexibility. The coaches and trainers are just starting to realize how important flexible muscles are to helping prevent sports injury. Flexibility has often been neglected in the overall conditioning of modern athletes. It's only now that its benefits are proving invaluable to all those serious about staying injury free.

How Does Stretching Prevent Injury?

One of the greatest benefits of stretching is that you're able to increase the length of both your muscles and tendons. This leads to an increased range of movement, which means your limbs and joints can move further before an injury occurs. Let's take a look at a few examples.

If the muscles in your neck are tight and stiff this limits your ability to look behind or turn your head around. If for some reason your head is turned backwards, past its' normal range of movement, in a football scrum or tackle for example, this could result in a muscle tear or strain. You can help to prevent this from happening by increasing the flexibility, and the range of movement, of the muscles and tendons in your neck.

And what about the muscles in the back of your legs? The Hamstring muscles. These muscles are put under a huge strain when doing any sort of sport which involves running and especially for sports which require kicking. Short, tight hamstring muscles can spell disaster for many sports people. By ensuring these muscles are loose and flexible, you'll cut your chance of a hamstring injury dramatically.

How else can stretching help? While injuries can occur at any time, they are more likely to occur if the muscles are fatigued, tight and depleted of energy. Fatigued, tight muscles are also less capable of performing the skills required for your particular sport or activity. Stretching can help to prevent an injury by promoting recovery and decreasing soreness. Stretching ensures that your muscles and tendons are in good working order. The more conditioned your muscles and tendons are, the better they can handle the rigors of sport and exercise, and the less likely that they'll become injured.

So as you can see, there's more to stretching than most people think. Stretching is a simple and effective activity that will help you to enhance your athletic performance, decrease your likelihood of sports injury and minimize muscle soreness.

Stretching is one of the most under-utilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating sprain and strain injury. Don't make the mistake of thinking that something as simple as stretching won't be effective.

Good Stretch? Bad Stretch?

How to decide for yourself.

Over the last few months our email server has been flooded with concerns about which stretches are good and which stretches are bad. In all cases someone has told the inquirer that they shouldn't do this stretch or that stretch, or that this is a good stretch and this is a bad stretch.

Some people have even seen stretches on our web site and emailed me to say (out of genuine concern) that this is a bad stretch because their coach, trainer or friend told them so.

So, are there only good stretches and bad stretches? Is there no middle ground? And if there are only good and bad stretches, how do you decide which ones are good and which ones are bad?

Let's put an end to the confusion once and for all...

There is no such thing as a good or bad stretch!
Just as there are no good or bad exercises, there are no good or bad stretches; only what is appropriate for the specific requirements of the individual. So a stretch that is perfectly okay for me may not be okay for you or someone else.

Let me give you an example. You wouldn't ask someone with a shoulder injury to do push-ups or freestyle swimming, but that doesn't mean that these are bad exercises. Now, consider the same scenario from a stretching point of view. You wouldn't ask that same person to do shoulder stretches, would you? But that doesn't mean that all shoulder stretches are bad.

You see, the stretch itself isn't good or bad, it's the way it's performed and who it's performed on that makes it effective and safe, or ineffective and harmful. To place a particular stretch into a category of "Good" or "Bad" is foolish and dangerous. To label a stretch as "Good" gives people the impression that they can do that stretch whenever and however they want and it won't cause them any problems.

The specific requirements of the individual are what are important!

Remember, stretches are neither good nor bad. Just like a motor vehicle, it's what you do with it that makes it good or bad. However, when choosing a stretch there are a number of precautions and "checks" you need to perform before giving that stretch the okay.

Make a general review of the individual.

Are they healthy and physically active, or have they been leading a sedentary lifestyle for the past 5 years? Are they a professional athlete? Are they recovering from a serious injury? Do they have aches, pains or muscle and joint stiffness in any area of their body?

Make a specific review of the area, or muscle group to be stretched.
Are the muscles healthy? Is there any damage to the joints, ligaments, tendons, etc.? Has the area been injured recently, or is it still recovering from an injury?

If the muscle group being stretched isn't 100% healthy avoid stretching this area altogether. Work on recovery and rehabilitation before moving onto specific stretching exercises. If however, the individual is healthy and the area to be stretched is free from injury, then apply the following to all stretches.

Warm up prior to stretching.

Warming up prior to stretching does a number of beneficial things, but primarily its purpose is to prepare the body and mind for more strenuous activity. One of the ways it achieves this is by helping to increase the body's core temperature while also increasing the body's muscle temperature. By increasing muscle temperature you are helping to make the muscles loose, supple and pliable. This is essential to ensure the maximum benefit is gained from your stretching.

Stretch gently and slowly. (Avoid bouncing)

Stretching slowly and gently helps to relax your muscles, which in turn makes stretching more pleasurable and beneficial. This will also help to avoid muscle tears and strains that can be caused by rapid, jerky movements.

Stretch ONLY to the point of tension.

Stretching is NOT an activity that was meant to be painful; it should be pleasurable, relaxing and very beneficial. Although many people believe that to get the most from their stretching they need to be in constant pain. This is one of the greatest mistakes you can make when stretching.

Breathe slowly and easily while stretching.

Many people unconsciously hold their breath while stretching. This causes tension in your muscles, which in turn makes it very difficult to stretch. To avoid this, remember to breathe slowly and deeply during your stretching. This helps to relax your muscles, promotes blood flow and increases the delivery of oxygen and nutrients to your muscles.

An example

Let's take a look at one of the most controversial stretches ever performed and see how the above would be applied.

The stretch to the right causes many a person to go into complete melt-down. It has a reputation as a dangerous, bad stretch and should be avoided at all costs. Even just thinking about this stretch may cause injury.

So why is it that at every Olympic Games, Commonwealth Games and World Championships you see sprinters doing this stretch before their events? Let's apply the above checks to find out.

Firstly, consider the person performing the stretch. Are they healthy, fit and physically active? If not, this isn't a stretch they should be doing. Are they elderly, over weight and unfit? Are they young and still growing? Do they lead a sedentary lifestyle? If so, they should avoid this stretch!

This first consideration alone would prohibit 50% of the

population from doing this stretch.

Secondly, review the area to be stretched. This stretch obviously puts a large strain on the muscles of the hamstrings and lower back. So if your hamstrings or lower back aren't 100% healthy, don't do this stretch.

This second consideration would probably rule out another 25%, which means this stretch is only suitable for about 25% of the population. Or, the well trained, physically fit, injury free athlete.

Then apply the four precautions above and the well trained, physically fit, injury free athlete can perform this stretch safely and effectively.

Remember, the stretch itself isn't good or bad. It's the way it's performed and who it's performed on that makes it effective and safe, or ineffective and harmful.

Stretching is one of the most under-utilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating sprain and strain injury. Don't make the mistake of thinking that something as simple as stretching won't be effective.

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PNF Stretching

Proprioceptive Neuromuscular Facilitation

Proprioceptive Neuromuscular Facilitation (PNF) is a more advanced form of flexibility training that involves both the stretching and contraction of the muscle group being targeted. PNF stretching was originally developed as a form of rehabilitation, and to that effect it is very effective. It is also excellent for targeting specific muscle groups, and as well as increasing flexibility, (and range of movement) it also improves muscular strength.

Warning!

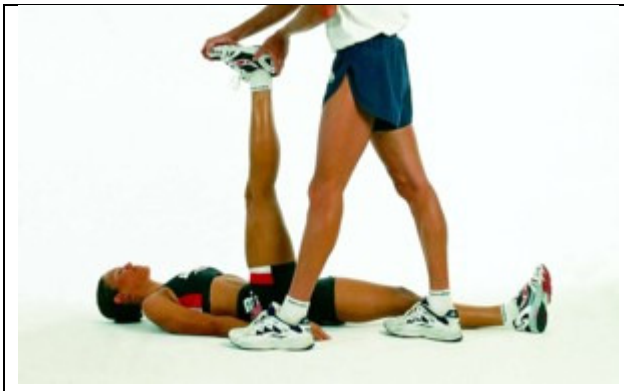
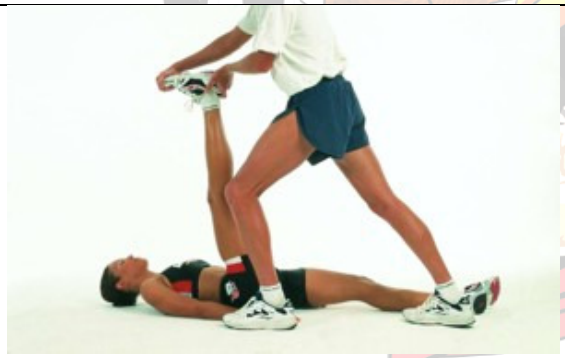
Certain precautions need to be taken when performing PNF stretches as they can put added stress on the targeted muscle group, which can increase the risk of soft tissue injury. To help reduce this risk, it is important to include a conditioning phase before a maximum, or intense effort is used.

Also, before undertaking any form of stretching it is vitally important that a thorough warm up be completed. Warming up prior to stretching does a number of beneficial things, but primarily its purpose is to prepare the body and mind for more strenuous activity. One of the ways it achieves this is by helping to increase the body's core temperature while also increasing the body's muscle temperature. This is essential to ensure the maximum benefit is gained from your stretching. Click here for a detailed explanation of how, why and when to perform your warm up.

How to perform a PNF stretch

The process of performing a PNF stretch involves the following. The muscle group to be stretched is positioned so that the muscles are stretched and under tension. The individual then contracts the stretched muscle group for 5 - 6 seconds while a partner, or immovable object, applies sufficient resistance to inhibit movement. Please note; the effort of contraction should be relevant to the level of conditioning.

The contracted muscle group is then relaxed and a controlled stretch is applied for about 30 seconds. The muscle group is then allowed 30 seconds to recover and the process is repeated 2 - 4 times. Refer to the diagrams below for a visual example.

	*The athlete and partner assume the position for the stretch, and then the partner extends the body limb until the muscle is stretched and tension is felt.*
	*The athlete then contracts the stretched muscle for 5 - 6 seconds and the partner must inhibit all movement. (The force of the contraction should be relevant to the condition of the muscle. For example,* ***if the muscle has been injured, do not apply a maximum contraction****).*
	*The muscle group is relaxed, then immediately and cautiously pushed past its normal range of movement for about 30 seconds. Allow 30 seconds recovery before repeating the procedure 2 - 4 times*

Information differs slightly about timing recommendations for PNF stretching depending on who you are talking to. Although there are conflicting responses to the question of how long should I contract the muscle group for and how long should I rest for between each stretch, I believe (through a study of research literature and personal experience) that the above timing recommendations provide the maximum benefits from PNF stretching.

Stretching is one of the most under-utilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating sprain and strain injury.

Don't make the mistake of thinking that something as simple as stretching won't be effective.

Stretching and the Warm up

Are You Confused?

Lately, I've been receiving a lot of questions referring to the latest studies and research findings, and one question that I receive most queries about concerns the role that stretching plays as part of the warm up.

Currently, there seems to be a lot of confusion about how and when stretching should be used as part of the warm up, and some people are under the impression that stretching should be avoided altogether.

This is a very important issue and needs to be clarified immediately. The rest of this article is dedicated to dispelling some common myths and misconceptions about stretching and its' role as part of the warm up.

What has Science got to say?

Most of the studies I've reviewed attempt to determine the effects of stretching on injury prevention. This is a mistake in itself and shows a lack of understanding as to how stretching is used as part of an injury prevention program and the warm up.

Stretching and its effect on physical performance and injury prevention is something that just can't be measured scientifically. Sure you can measure the effect of stretching on flexibility with simple tests like the "Sit and Reach" test, but then to determine how that affects athletic performance or injury susceptibility is near impossible.

One of the more recent studies on stretching supports this view by concluding;

"Due to the paucity, heterogeneity and poor quality of the available studies no definitive conclusions can be drawn as to the value of stretching for reducing the risk of exercise-related injury." (The efficacy of stretching for prevention of exercise-related injury: a systematic review of the literature, 2003, Weldon)

To put the above quote in layman's terms; there hasn't been enough studies done and the studies that have been done are not specific or consistent enough. For the most comprehensive assessment and conclusion of research done on the affects of stretching I suggest you have a read through the following article, The Truth about Stretching

The Greatest Misconception

Confusion about what stretching accomplishes, as part of the warm up, is causing many to abandon stretching altogether. The key to understanding the role stretching plays can be found in the previous sentence. But, you have to read it carefully.

Stretching, as part of the warm up!

Here's the key: Stretching is a critical part of the warm up, but stretching is NOT the warm up.

Don't make the mistake of thinking that doing a few stretches constitutes a warm up. An effective warm up has a number of very important key elements, which work together to minimize the likelihood of sports injury and prepare the individual for physical activity.

Identifying the components of an effective and safe warm up, and executing them in the correct order is critical. Remember, stretching is only one part of an effective warm up and its' place in the warm up routine is specific and dependant on the other components.

The four key elements that should be included to ensure an effective and complete warm up are:

The general warm up

This phase of the warm up consists of 5 to 15 minutes of light physical activity. The aim here is to elevate the heart rate and respiratory rate, increase blood flow and increase muscle temperature.

Static stretching

Next, 5 to 15 minutes of gentle static stretching should be used to gradually lengthen all the major muscle groups and associated tendons of the body.

The sports specific warm up

During this phase of the warm up, 10 to 15 minutes of sport specific drills and exercises should be used to prepare the athlete for the specific demands of their chosen sport.

Dynamic stretching

Dynamic stretching involves a controlled, soft bounce or swinging motion to force a particular body part past its usual range of movement. The force of the bounce or swing is gradually increased but should never become radical or uncontrolled.

Please note; dynamic stretching carries with it a high risk of injury if used incorrectly. Dynamic stretching is more for muscular conditioning than flexibility and is really only suited for professional, well trained, highly conditioned athletes. Dynamic stretching should only be used after a high level of general flexibility has been established.

All four parts are equally important and any one part should not be neglected or thought of as not necessary. All four elements work together to bring the body and mind to a physical peak, ensuring the athlete is prepared for the activity to come.

So what conclusions can we make?

Stretching is beneficial, when used correctly. However, as with most activities there are rules and guidelines to ensure that they are safe, and stretching is no exception. Stretching can be extremely dangerous and harmful if used incorrectly.

Remember, stretching is just one very important component that assists to reduce the risk of injury and improve athletic performance. The best results are achieved when stretching is used in combination with other injury reduction techniques and conditioning exercises.

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Stretching for Injury Rehabilitation

Speed up Your Recovery with the right type of Stretching.

Choosing the right type of stretching during your rehabilitation program will have a tremendous effect on the speed of your recovery, while choosing the wrong type could lead to further injury and a very slow recovery.

So what type of stretching is best for which phase of the recovery process?

The recovery process of a soft tissue injury can be broken down into a number of phases and it's important that the right type of stretching be employed for each phase.

The First 72 Hours

Without a doubt, the most effective, initial treatment for soft tissue injury is the R.I.C.E.R. regime. This involves the application of (R) rest, (I) ice, (C) compression, (E) elevation and obtaining a (R) referral for appropriate medical treatment.

Where the R.I.C.E.R. regime has been used immediately after the occurrence of an injury, it has been shown to significantly reduce recovery time. R.I.C.E.R. forms the first, and perhaps most important stage of injury rehabilitation, providing the early base for the complete recovery of injury.

However, during this phase of the rehabilitation process NO STRETCHING should be used at all! This is not the time to start stretching. Concentrate on the R.I.C.E.R. regime and avoid all stretching or any activity that puts stress on the injured area. Stretching during this early stage of the rehabilitation process will only cause more damage to the injured tissues. Avoid stretching during the first 72 hours.

The Next 10 to 14 Days

After the first 72 hours most of the initial swelling will have subsided and you can start with some gentle active rehabilitation techniques.

The most effective treatment at this stage is the use of heat and massage, but including light, gentle static and passive stretching exercises after your heat and massage treatment will help to dramatically speed up the recovery process. So what is static and passive stretching?

Static stretching is performed by placing the body into a position whereby the muscle (or group of muscles) to be stretched is under tension. Both the opposing muscle group and the muscles to be stretched are relaxed. Then slowly and cautiously the body is moved to increase the tension of the stretched muscle group. At this point the position is held or maintained to allow the muscles to lengthen.

Passive stretching is very similar to static stretching; however another person or apparatus is used to help further stretch the muscles. Due to the greater force applied to the muscles, this form of stretching is slightly more hazardous. Therefore it is very important that any apparatus used is both solid and stable. When using a partner it is imperative that no jerky or bouncing force is applied to the stretched muscle. So, choose your partner carefully, they must be responsible for your safety while stretching.

The important point to remember during this phase of the rehabilitation process is light, gentle stretching. Never, never, never do any activity that hurts injured area. Of course you may feel some discomfort, but never push yourself to the point where you're feeling pain. Be very careful with any activity you do. Pain is the warning sign; don't ignore it.

The Next 2 to 5 Weeks

The aim of this phase of your rehabilitation will be to regain all the fitness components that were lost as a result of the injury. Regaining your flexibility, strength, power, muscular endurance, balance, and co-ordination will be the primary focus.

Without this phase of the rehabilitation, there is no hope of completely and permanently making a full recovery from your injury. A quote from a great book called "Sporting injuries" by Peter Dornan & Richard Dunn will help to reinforce the value of this phase of the rehabilitation process.

"The injury symptoms will permanently disappear only after the patient has undergone a very specific exercise program, deliberately designed to stretch and strengthen and regain all parameters of fitness of the damaged structure or structures. Further, it is suggested that when a specific stretching program is followed, thus more permanently reorganizing the scar fibers and allowing the circulation to become normal, the painful symptoms will disappear permanently."

So what type of stretching is best to use during this phase? Stick with the static and passive stretching exercises described above, but also include PNF Stretching.

PNF stretching, or Proprioceptive Neuromuscular Facilitation, is a more advanced form of flexibility training that involves both the stretching and contraction of the muscle group being targeted. PNF stretching was originally developed as a form of rehabilitation and to that effect it is very effective. It is also excellent for targeting specific muscle groups, and as well as increasing flexibility, (and range of movement) it also improves muscular strength.

Looking Long Term

Once you're over your injury and have started to regain the fitness components that were lost during the injury process, it's time to focus on making the injured area stronger and more flexible that it was before the injury occurred. To do this, the best types of stretches to use are dynamic and active stretching exercises.

Dynamic stretching uses a controlled, soft bounce or swinging motion to move a particular body part to the limit of its range of movement. The force of the bounce or swing is gradually increased but should never become radical or uncontrolled.

Active stretching is performed without any aid or assistance from an external force. This form of stretching involves using only the strength of your opposing muscles to generate

a stretch within the targeted muscle group. The contraction of the opposing muscles helps to relax the stretched muscles. A classic example of an active stretch is one where an individual raises one leg straight out in front as high as possible and then maintains that position with out any assistance from a partner or object.

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STRETCHING - Scientifically

Without a doubt, the most common questions I'm asked is; "What's your view on the latest scientific studies and research findings in regards to stretching?"

The short answer is; "They all make for interesting reading, but I don't put a huge amount of confidence in them." Let me explain why.

Most of the studies I've reviewed attempt to determine the effects of stretching on injury prevention. This is a mistake in itself, and shows a lack of understanding as to how stretching is used as part of an injury prevention program.

Stretching, by itself, will not prevent injury. In fact, stretching can cause injury if certain precautions aren't taken.

Plus, it's not just a flexibility problem that can lead to injury. It could be a strength imbalance. It could be a stability or balance problem. It could be a proprioceptive imbalance. It could have to do with postural imbalances. It could have to do with physical imbalances like leg length differences. Or, it could simply be a matter of trying to do too much, too soon.

Stretching is just one very important component that assists in reducing the risk of injury. The best results are achieved when stretching is used in combination with other injury reduction techniques.

Stretching and its effect on physical performance and injury prevention is something that just can't be measured scientifically. The effects of stretching are very hard to measure and all the studies that I have seen are nothing more than anecdotal studies. Meaning the results achieved, or not achieved, are simply that persons perception of what has improved or not improved.

You see, stretching is not a science. It is near impossible to PROVE anything about stretching, scientifically. Sure you can measure the effect of stretching on flexibility with simple tests like the "Site and Reach test" but then to determine how that affects athletic performance or injury susceptibility is near impossible. The only way to do it would be

with muscle biopsy's, which can be extremely painful and lead to muscle damage if done repeatedly.

I've seen so many people benefit from stretching and increased flexibility, that I'm absolutely positive it is beneficial. Most people involved in the "hands-on" side of coaching and sports training aren't worried by this type of study. It's mostly the academics that do the majority of there coaching from behind a desk, that are influenced by these studies.

So what can we say about the benefits of stretching...
Firstly: Upon undertaking a regular stretching program a number of changes occur within the body. Firstly, by placing particular parts of the body in certain positions, we are able to increase the length of muscles and tendons. As a result of this, a reduction in general muscle tension is achieved and our normal range of movement is increased.

By increasing our range of movement we are increasing the distance our limbs can move before damage occurs to the muscles and tendons. For example, the muscles and tendons in the back of our legs are put under great strain when kicking a football. Therefore, the more flexible and pliable those muscles are, the further our leg can travel forward before a strain or injury occurs to them.

The benefits of an extended range of movement includes: increased comfort; a greater ability to move freely; and a lessening of our susceptibility to muscle and tendon strain injuries.

Secondly: There is a dangerous stretching myth that says, 'if you stretch too much you will lose both joint stability and muscle power. This is totally untrue. By increasing our muscle and tendon length we are increasing the distance over which our muscles are able to contract. This results in a potential increase to our muscles' power and therefore increases our athletic ability, while also leading to an improvement in dynamic balance, or the ability to control our muscles.

Thirdly: We have all experienced what happens when you go for a run or to the gym for the first time in a few months. The following day our muscles are tight, sore, stiff and it's usually hard to even walk down a flight of stairs. This soreness that usually accompanies strenuous physical activity is often referred to as post exercise muscle soreness. This soreness is the result of micro tears, (minute tears within the muscle fibers), blood pooling and accumulated waste products, such as lactic acid. Stretching, as part of an effective cool-down, helps to alleviate this soreness by lengthening the individual muscle fibers, increasing blood circulation and removing waste products.

Fourthly: Fatigue is a major problem for everyone, especially those who exercise. It results in a decrease in both physical and mental performance. Increased flexibility through stretching can help prevent the effects of fatigue by taking pressure off the working muscles. For every muscle in the body has an opposite or opposing muscle and if the opposing muscles are more flexible, the working muscles do not have to exert as much force against the opposing muscles. Therefore each movement of the working muscles actually takes less effort.

And finally: Any person who experiences the benefits of stretching is certainly more likely to feel good about themselves. This leads to a confidence and assuredness, which

helps to enhance physical performance and motivate the individual to participate in exercise.

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Up Activities and Stretching Exercises

Warm up properly, and reduce the risk of sports injury!

The warm up activities are a crucial part of any exercise regime or sports training. The importance of a structured warm up routine should not be under estimated when it comes to the prevention of sports injury.

An effective warm up has a number of very important key elements. These elements, or parts, should all be working together to minimize the likelihood of sports injury from physical activity.

Warming up prior to any physical activity does a number of beneficial things, but primarily its main purpose is to prepare the body and mind for more strenuous activity. One of the ways it achieves this is by helping to increase the body's core temperature, while also increasing the body's muscle temperature. By increasing muscle temperature you're helping to make the muscles loose, supple and pliable.

An effective warm up also has the effect of increasing both your heart rate and your respiratory rate. This increases blood flow, which in turn increases the delivery of oxygen and nutrients to the working muscles. All this helps to prepare the muscles, tendons and joints for more strenuous activity.

Keeping in mind the aims or goals of an effective warm up, we can then go on to look at how the warm up should be structured.

Obviously, it's important to start with the easiest and most gentle activity first, building upon each part with more energetic activities, until the body is at a physical and mental peak. This is the state in which the body is most prepared for the physical activity to come, and where the likelihood of sports injury has been minimized as much as possible. So, how should you structure your warm up to achieve these goals?

There are four key elements, or parts, which should be included to ensure an effective and complete warm up. They are:

- The general warm up;
- Static stretching;

- The sports specific warm up; and
- Dynamic stretching.

All four parts are equally important and any one part should not be neglected or thought of as not necessary. All four elements work together to bring the body and mind to a physical peak, ensuring the athlete is prepared for the activity to come. This process will help ensure the athlete has a minimal risk of sports injury.

Let's have a look at each element individually.

1.) General warm up
The general warm up should consist of a light physical activity. Both the intensity and duration of the general warm up (or how hard and how long), should be governed by the fitness level of the participating athlete. Although a correct general warm up for the average person should take about five to ten minutes and result in a light sweat.

The aim of the general warm up is simply to elevate the heart rate and respiratory rate. This in turn increases the blood flow and helps with the transportation of oxygen and nutrients to the working muscles. This also helps to increase the muscle temperature, allowing for a more effective static stretch. Which bring us to part two.

2.) Static stretching
Static stretching is a very safe and effective form of basic stretching. There is a limited threat of injury and it is extremely beneficial for overall flexibility. During this part of the warm up, static stretching should include all the major muscle groups, and this entire part should last for about five to ten minutes.

Static stretching is performed by placing the body into a position whereby the muscle or group of muscles to be stretched is under tension. Both the opposing muscle group (the muscles behind or in front of the stretched muscle), and the muscles to be stretched are relaxed. Then slowly and cautiously the body is moved to increase the tension of the muscle, or group of muscles to be stretched. At this point the position is held or maintained to allow the muscles and tendons to lengthen.

This second part of an effective warm up is extremely important, as it helps to lengthen both the muscles and tendons which in turn allow your limbs a greater range of movement. This is very important in the prevention of muscle and tendon injuries.

The above two elements form the basis, or foundation for a complete and effective warm up. It is extremely important that these two elements be completed properly before moving onto the next two elements. The proper completion of elements one and two, will now allow for the more specific and vigorous activities necessary for elements three and four.

3.) Sport specific warm up
With the first two parts of the warm up carried out thoroughly and correctly, it is now safe to move onto the third part of an effective warm up. In this part, the athlete is specifically preparing their body for the demands of their particular sport. During this part of the warm up, more vigorous activity should be employed. Activities should reflect the type of movements and actions which will be required during the sporting event.

4.) Dynamic stretching
Finally, a correct warm up should finish with a series of dynamic stretches. However, this form of stretching carries with it a high risk of injury if used incorrectly. It should really only be used under the supervision of a professional sports coach or trainer. Dynamic stretching is more for muscular conditioning than flexibility and is really only suited for professional, well trained, highly conditioned athletes. Dynamic stretching should only be used after a high level of general flexibility has been established.

Dynamic stretching involves a controlled, soft bounce or swinging motion to force a particular body part past its usual range of movement. The force of the bounce or swing is gradually increased but should never become radical or uncontrolled.

During this last part of an effective warm up it is also important to keep the dynamic stretches specific to the athletes' particular sport. This is the final part of the warm up and should result in the athlete reaching a physical and mental peak. At this point the athlete is most prepared for the rigors of their sport or activity.

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The above information forms the basis of a complete and effective warm up. However, I am well aware that this entire process is somewhat of an 'ideal' or 'perfect' warm up. I am also well aware that this is not always possible or convenient in the real world. Therefore, the individual athlete must become responsible for assessing their own goals and adjusting their warm up accordingly.

For instance, the time you commit to your warm up should be relative to your level of involvement in your particular sport. So, for people just looking to increase their general level of health and fitness, a minimum of five to ten minutes would be enough. However, if you are involved in high level competitive sport you need to dedicate adequate time and effort to a complete warm up.

Running Injuries, Sports Injuries and Treatment for Pulled Muscles

A guide to cutting your recovery time by days, if not weeks!

I get a lot of questions from people asking about specific treatments for sports injuries, like running injuries and other common pulled muscle complaints. The unfortunate thing about most of these requests is that the injury occurred some time ago. This time lapse between the injury occurring, and treatment sort, is the biggest stumbling block to a full and complete recovery.

What I did find, was a lot of information which related to treating specific sports injuries long after they'd occurred. However, I found very little information relating to the immediate treatment of sports injuries. This was quite disappointing, because if people are only treating injuries long after they've occurred, they're really putting themselves at a great disadvantage.

What follows is a complete three part series of the most appropriate initial treatments for all soft tissue, sports injuries. This information will definitely cut your recover time by days, if not weeks.

Before we start!

Let's have a quick look at the type of injuries I'm talking about. The type of sports injuries I'm referring to here are the soft tissue injuries, which are very common in most, if not all sports. These injuries include sprains, strain, tears and bruises which affect muscles, tendons, ligaments and joints. The soft tissues of the body.

Examples of common soft tissue injuries would include things like hamstring tears, sprained ankles, pulled calf muscles, strained shoulder ligaments, corked thigh, etc. Remember a sprain refers to a tear or rupture of the ligaments, while a strain refers to a tear or rupture of the muscles or tendons.

The sort of injuries I'm NOT talking about here are injuries which affect the head, neck, face or spinal cord. Injuries which involve shock, excessive bleeding, or bone fractures and breaks. The treatment of these types of injuries goes way beyond the relatively simple soft tissue injuries that I'm discussing here.

Priority Number 1

The first priority when treating any sports injury is, "Do No Further Damage." So before we get into the treatment of soft tissue injuries, there's one important point that I should discuss first.

Before you start treating any injury, whether to yourself or someone else, first STOP and take account of what has occurred. Consider things like...is the area safe from other dangers? Is there a threat to life? Is the injury serious enough to seek emergency help? Then, using the word STOP as an acronym;

S: (stop) Stop the injured person from moving. Consider stopping the sport or game if necessary.

T: (talk) Ask questions like; what happened? How did it happen? What did it feel like? Where does it hurt? Have you injured this part before?

O: (observe) Look for things like swelling, bruising, deformity and tenderness.

P: (prevent) Remember, do no further damage. Prevent further injury.

Once you've taken a few moments to make sure the injury isn't life threatening, it's then time to start treating the injury. Remember, the sooner you start treating a sports injury, the more chance you have of a full and complete recovery. The longer you wait, the worse it's going to be.

R.I.C.E.R.

Without a doubt, the most effective, initial treatment for soft tissue injuries is the R.I.C.E.R. regime. This involves the application of (R) rest, (I) ice, (C) compression, (E) elevation and obtaining a (R) referral for appropriate medical treatment.

Where the R.I.C.E.R. regime has been used immediately after the occurrence of an injury, it has been shown to significantly reduce recovery time. R.I.C.E.R. forms the first, and perhaps most important stage of injury rehabilitation, providing the early base for the complete recovery of injury.

When a soft tissue injury occurs there is a large amount of uncontrolled bleeding around the injury site. This excessive bleeding causes swelling, which puts pressure on nerve endings and results in increased pain. It is exactly this process of bleeding, swelling and pain which the R.I.C.E.R. regime will help to alleviate. This will also limit tissue damage and help the healing process.

The "How To"

R: (rest) It is important that the injured area be kept as still as possible. If necessary support the injured area with a sling or brace. This will help to slow down blood flow to the injured area and prevent any further damage.

I: (ice) By far the most important part. The application of ice will have the greatest effect on reducing bleeding, swelling and pain. Apply ice as soon as possible after the injury has occurred.

How do you apply ice? Crushed ice in a plastic bag is usually best. However, blocks of ice, commercial cold packs and bags of frozen peas will all do fine. Even cold water from a tap is better than nothing at all.

When using ice, be careful not to apply it directly to the skin. This can cause "ice burns" and further skin damage. Wrapping the ice in a damp towel generally provides the best protection for the skin.

How long? How often? This is the point where few people agree. Let me give you some figures to use as a rough guide, and then I'll give you some advice from personal experience. The most common recommendation is to apply ice for 20 minutes every 2 hours for the first 48 to 72 hours.

These figures are a good starting point, but remember they're only a guide. You must take into account that some people are more sensitive to cold than others. Also be aware that children and elderly people have a lower tolerance to ice and cold. Finally, people with circulatory problems are also more sensitive to ice. Remember to keep these things in mind when treating yourself or someone else with ice.

Personally, I recommend that people use their own judgment when applying ice to themselves. For some people, 20 minutes is way too much. For others, especially well conditioned athletes, they can leave ice on for up to an hour at a time. The individual should make the decision as to how long the ice should stay on.

My personal recommendation is that people should apply ice for as long as it is comfortable. Obviously, there will be a slight discomfort from the cold, but as soon as

pain or excessive discomfort is experienced, it's time to remove the ice. It's much better to apply ice for 3 to 5 minutes a couple of time an hour, than not at all.

C: (compression) Compression actually achieves two things. Firstly, it helps to reduce both the bleeding and swelling around the injured area, and secondly, it provides support for the injured area. Simply use a wide, firm, elastic, compression bandage to cover the injured part. Make sure you bandage both above and below the injured area.

E: (elevation) Simply raise the injured area above the level of the heart at all possible times. This will further help to reduce the bleeding and swelling.

R: (referral) If the injury is severe enough, it is important that you consult a professional physical therapist or a qualified sports doctor for an accurate diagnosis of the injury. With an accurate diagnosis, you can then move onto a specific rehabilitation program to further reduce your injury time.

Before we finish up, there are a few things which you must avoid during the first 24 to 72 hours after an injury. Be sure to avoid any form of heat at the injury site. This includes heat lamps, heat creams, spas, Jacuzzis and saunas.

Avoid all movement and massage of the injured area. Also avoid excessive alcohol. All these things will increase the bleeding, swelling and pain of your injury. Avoid them at all costs.

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Cool Down

Recover Faster & Avoid Injury!

Many people dismiss the cool down as a waste of time, or simply unimportant. In reality the cool down is just as important as the warm up, and if you want to stay injury free, it's vital.

Although the warm up and cool down are just as important as each other, they are important for different reasons. While the main purpose of warming up is to prepare the body and mind for strenuous activity, cooling down plays a different role.

Why Cool Down?

The main aim of the cool down is to promote recovery and return the body to a pre-exercise, or pre-work out level. During a strenuous work out your body goes through a number of stressful processes. Muscle fibers, tendons and ligaments get damaged, and waste products build up within your body.

The cool down, performed properly, will assist your body in its repair process. One area the cool down will help with is "post exercise muscle soreness." This is the soreness that is usually experienced the day after a tough work out. Most people experience this after having a lay-off from exercise, or at the beginning of their sports season. I remember

running a half marathon with very little preparation, and finding it difficult to walk down steps the next day because my quadriceps were so sore. That discomfort is "post exercise muscle soreness."

This soreness is caused by a number of things. Firstly, during exercise, tiny tears called micro tears develop within the muscle fibers. These micro tears cause swelling of the muscle tissues which in turn puts pressure on the nerve endings and results in pain.

Secondly, when exercising, your heart is pumping large amount of blood to the working muscles. This blood is carrying both oxygen and nutrients that the working muscles need. When the blood reaches the muscles the oxygen and nutrients are used up. Then the force of the contracting (exercising) muscles pushes the blood back to the heart where it is re-oxygenated.

However, when the exercise stops, so does the force that pushes the blood back to the heart. This blood, as well as waste products like lactic acid, stays in the muscles, which in turn causes swelling and pain. This process is often referred to as "blood pooling."

So, the cool down helps all this by keeping the blood circulating, which in turn helps to prevent blood pooling and also removes waste products from the muscles. This circulating blood also brings with it the oxygen and nutrients needed by the muscles, tendons and ligaments for repair.

The Key Parts of an Effective Cool Down

Now we know what the cool down does and why it is so important, let's have a look at the structure of an effective cool down. There are three key elements, or parts, which should be included to ensure an effective and complete cool down. They are;

- Gentle exercise;
- Stretching; and
- Re-fuel.

All three parts are equally important and any one part should not be neglected or thought of as not necessary. All three elements work together to repair and replenish the body after exercise.

To follow are two examples of effective cool downs. The first is an example of a cool down used by a professional athlete. The second is typical of someone who simply exercises for general health, fitness and fun.

Cool Down Routines

Example 1: - For the Professional

10 to 15 minutes of easy exercise. Be sure that the easy exercise resembles the type of exercise that was done during your work out. For example, if your workout involved a lot of running, cool down with easy jogging or walking.

Include some deep breathing as part of your easy exercise to help oxygenate your system.

Follow with about 20 to 30 minutes of stretching. Static stretching and PNF stretching is usually best.

Re-fuel. Both fluid and food are important. Drink plenty of water, plus a good quality sports drink. The best type of food to eat straight after a work out is that which is easily digestible. Fruit is a good example.

Example 2: - For the Amateur

3 to 5 minutes of easy exercise. Be sure that the easy exercise resembles the type of exercise that was done during your work out. For example, if your workout involved a lot of running, cool down with easy jogging or walking.

Include some deep breathing as part of your easy exercise to help oxygenate your system.

Follow with about 5 to 10 minutes of stretching. Static stretching and PNF stretching is usually best.

Re-fuel. Both fluid and food are important. Drink plenty of water, plus a good quality sports drink. The best type of food to eat straight after a work out is that which is easily digestible. Fruit is a good example.

Getting serious about your cool down and following the above examples will make sure you recover quicker from your work outs, and stay injury free.

Overtraining

Not giving your body the rest it needs may lead to a sports injury disaster!

One of the biggest challenges to achieving your fitness goals is consistency. If you're repeatedly getting sick, run down and over-trained it becomes very difficult to stay injury free. So, how do you keep the consistency of regular exercise, without over doing it and becoming sick or injured?

Amateur and professional athletes alike are constantly battling with the problem of overtraining. Being able to juggle just the right amount of training, with enough sleep and rest, and the perfect nutritional diet is not an easy act to master. Throw in a career and a family and it becomes near impossible.

So, what is overtraining? Overtraining is the result of giving your body more work or stress than it can handle. Overtraining occurs when a person experiences stress and physical trauma from exercise faster than their body can repair the damage.

Now this doesn't happen overnight, or as a result of one or two work-outs. In fact, regular exercise is extremely beneficial to your general health and fitness, but you must

remember that it's exercise that breaks your body down, while it's the rest and recovery that makes you stronger and healthier. Improvements only occur during the times of rest.

Remember stress can come from a multitude of sources. It's not just physical stress that causes overtraining. Sure, excessive exercise may lead to overtraining, but don't forget to consider other stresses, such as family or work commitments. Remember, stress is stress, whether it's a physical, mental or emotional stress, it still has the same effect on your health and well-being.

Reading the Signs

At this point in time there are no tests which can be performed to determine whether you are over trained or not. You can't go to your local doctor or even a sports medicine laboratory and ask for a test for overtraining. However, while there are no tests for overtraining, there are a number of signs and symptoms that you should be on the lookout for. These signs and symptoms should act as a warning bell, which will give you advanced notice of possible dangers to come.

There are quite a number of signs and symptoms to be on the lookout for. To make it easier for you to recognize them I've grouped them into either physical or psychological signs or symptoms.

Now, suffering from any one or two of the following signs or symptoms doesn't automatically mean you are suffering from overtraining. However, if you recognize a number, say 5 or 6 of the following signs and symptoms, then it may be time to take a close look at the volume and intensity of your work load.

- Physical Signs & Symptoms
- Elevated resting pulse / heart rate
- Frequent minor infections
- Increased susceptibility to colds and flu's
- Increases in minor injuries
- Chronic muscle soreness or joint pain
- Exhaustion
- Lethargy
- Weight loss
- Appetite loss
- Insatiable thirst or dehydration
- Intolerance to exercise
- Decreased performance
- Delayed recovery from exercise

- Psychological Signs & Symptoms
- Fatigued, tired, drained, lack of energy
- Reduced ability to concentrate
- Apathy or no motivation
- Irritability
- Anxiety
- Depression
- Headaches
- Insomnia
- Inability to relax
- Twitchy, fidgety or jittery

As you can see by the number of signs and symptoms there are a lot of things to look out for. Generally the most common signs and symptoms to look for are a total loss of motivation in all areas of your life (work or career, health and fitness etc.), plus a feeling of exhaustion. If these two warning signs are present, plus a couple of the other listed signs and symptoms, then it may be time to take a short rest before things get out of hand.

The Answer to the Problem

Okay, you feel run down and totally exhausted. You've got no motivation to do anything. You can't get rid of that niggling knee injury. You're irritable, depressed and have totally lost your appetite. Sounds like you're over trained. What do you do now?

As with most things, prevention is by far better than cure, so let’s start by having a quick look at a few things you can do to prevent overtraining.

Only making small and gradual increases to your exercise program over a period of time. Eating a well balanced, nutritious diet. Ensuring adequate relaxation and sleep. Being prepared to modify your training to suit environmental conditions. For example, on a very hot day, going to the pool instead of out in the sun. Being able to monitor other stresses on your life and make adjustments to suit. Avoiding monotonous training, by varying your exercise as much as possible. Not exercising during an illness, and most of all be flexible and have some fun with what you do.

While prevention should always be your aim, there will be times when overtraining will occur and you'll need to know what to do to get back on track.

Your first priority is to put your feet up and take a rest. Anywhere from 3 to 5 days should do the trick, depending on how severe the overtraining is. During this time forget about exercise, your body needs a rest so give it one. A physical rest, as well as a mental rest. There's no point in beating yourself up mentally over losing a few days exercise.

Try to get as much sleep and relaxation as possible. Go to bed early and catch a nap whenever you can. Make sure you increase your intake of highly nutritious foods and take an extra dose of vitamins and minerals.

After the initial 3 to 5 days rest you can gradually get back into your normal exercise routine, but start off slowly. Most research states that it's okay to start off with the same intensity and time of exercise but cut back on the frequency. So if you would normally exercise 3 or 4 times a week, cut that back to only twice a week for the next week or two. After that you should be right to resume your normal exercise regime.

Sometimes it's a good idea to have a rest, like the one outlined above, whether you're feeling run down or not. It will give both your mind and body a chance to fully recover from any problems that may be building up without you even knowing it. It will also freshen you up, give you a renewed motivation and help you to look forward to your exercise again. Don't underestimate the benefits of a good rest.

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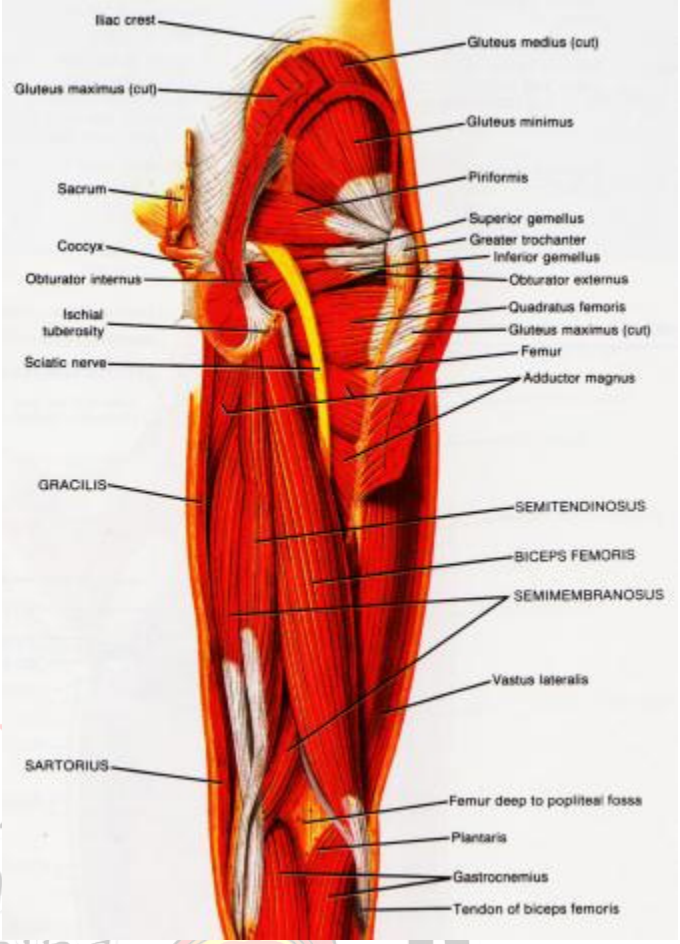
Hamstring Injury Treatment and Hamstring Stretching Exercises!

Why are hamstring injuries so common, and what can you do to prevent them?

Effective hamstring injury treatment & hamstring stretching exercises are vital to the overall health and condition of the hamstring muscles. The hamstring muscles are very susceptible to tears, strains and other common sporting injuries.

Those athletes particularly vulnerable are competitors involved in sports which require a high degree of speed, power and agility. Sports such as Track & Field (especially the sprinting events) and other sports such as soccer, basketball, tennis and football seem to have more than their fair share of hamstring injuries.

Let’s start by having a quick look at the particular muscles which make up the hamstrings and where exactly they're located. We'll then move onto some common causes of hamstring injuries and finally look at some preventative measures and treatments.



The hamstring group of muscles, located at the back of the upper leg, is actually a group of three separate muscles. The top of these muscles are attached to the lower part of the pelvis and the bottom of the hamstring muscles is attached to the lower leg bone just below the knee joint. The technical or anatomical names for the three hamstring muscles are semimembranosus, semitendinosus and biceps femoris.

The picture to the right shows the muscles located at the rear of the upper right leg. The three specific hamstring muscles can be seen on the picture, by looking for the anatomical names located half way down the right hand side.

Now that we know exactly what and where the hamstrings are, let's take a look at some of the most common causes for hamstring injuries. By far the most common cause of hamstring injuries originates from an imbalance between the quadriceps muscles (located at the front of the upper leg) and the hamstring muscles.

The quadriceps are a very large, strong group of muscles which help to extend the leg. These muscles can become so strong that they overpower the hamstrings, putting a massive amount of tension on the hamstring muscles. Combine strong quadriceps with weak hamstrings and you have a hamstring injury waiting to happen.

Other factors which contribute to hamstring injuries are a lack of flexibility and poor strength of the hamstring muscles. Also, when the hamstrings become fatigued or tired they are more susceptible to injuries.

The best preventative measures involve a consistent program of both stretching and strengthening exercises. Increased flexibility will contribute greatly to the ability of the hamstring muscles to resist strains and injury. To follow are two very effective and very safe hamstring stretches.

In the stretch to the left, simply kneel down on one knee and place your other leg straight out in front with your heal on the ground. Keep your back straight. Make sure your toes are pointing straight up and gently reach towards your toes with one hand. Use your other arm for balance. Hold this stretch for about 20 to 30 seconds and repeat at least 2 to 3 times.

In the stretch to the right, stand with one foot raised onto a chair, fence railing or similar object. Keep your raised leg slightly bent, with your toes on the edge of the chair. Let your heal drop off the edge of the chair. Keep your back straight and gently move your chest towards your raised leg. As above, hold this stretch for about 20 to 30 seconds and repeat at least 2 to 3 times.

Stretching is one of the most under-utilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating sprain and strain injury. Don't make the mistake of thinking that something as simple as stretching won't be effective.

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Warming up correctly will also contribute greatly to reducing the likelihood of a hamstring injury, and don't just stretch before you exercise. Make sure you stretch both before and after any physical activity. Dedicate time to your entire flexibility, this will not only help you avoid injury, it will also make you a better athlete.

If you do happen to suffer from a hamstring injury, it's important that correct first aid principles are applied immediately. The RICER regime explains the correct treatment for all muscle strain injuries. RICER stands for Rest, Ice, Compression, Elevation, and then obtaining a Referral from a qualified sports doctor or physiotherapist. So, as soon as a hamstring injury occurs, rest the injured limb, apply ice to the effected area, apply a compression bandage and elevate the limb if possible. This treatment needs to continue for at least 48 to 72 hours. This is the most critical time for the injured area, correct treatment now can mean the difference between an annoying injury or a permanent, re-occurring, debilitating injury.

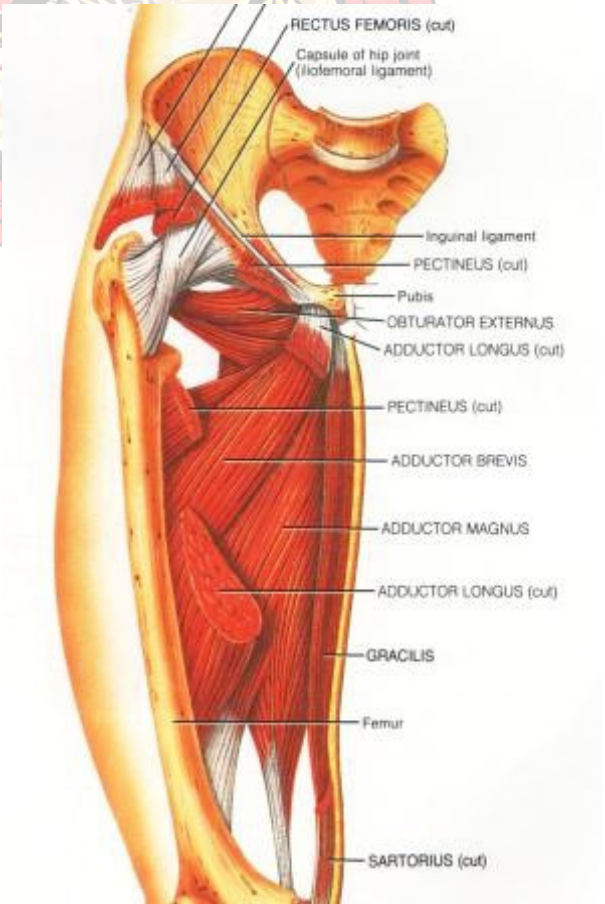
After the first 72 hours obtain a referral from a qualified professional and start a comprehensive rehabilitation program. This should include a great deal of strength and stretching exercises, as well as other rehabilitation activities such as massage and ultra-sound.

Pain and Groin Pull Injury

A Guide for the Treatment and Prevention of Groin Injuries!

Groin pain; Groin strain; Groin pull injury; or Adductor strain. Call it what you want, the fact is, it's a very common muscle strain injury that currently plagues sports like soccer, basketball, football, hockey, track & field and racquet sports.

The groin, described as the junction between the lower limbs and torso, is vulnerable to a lot of different injuries. Hernias, stress fractures, and avulsion fractures are all common injuries that affect the groin, but for this issue we'll be focusing on one of the most common groin injuries; groin pull or groin strain.



In this issue I'm going to take a slightly different approach to the way I usually write these articles. Firstly, I'm going to talk briefly about what a groin pull is, what causes a groin pull and what to do to prevent a groin pull. Then I'm going to reproduce a detailed management plan for the correct treatment and complete rehabilitation of a groin strain.

This detailed management plan comes from one of my old university text books, called Modern Principles of Athletic Training by Daniel D. Arnheim. It's one of those 900 page door-stoppers, but it's

the book I refer to most for information on sports injury prevention and rehabilitation. It's extremely detailed and a valuable resource for anyone who works in the health and fitness industry. So...

What is a Groin Pull?

Depending on the severity, a groin pull can range from a slight stretching, to a complete rupture of the muscles that attach the pubic (pelvis) bone to the thigh (femur) bone.

A groin pull or strain specifically affects the "Adductor" muscles. (Adductor; meaning, moves part closer to the midline, or middle of the body) These muscles are located on the inside of the thigh, and help to bring the legs together.

The adductor muscles consist of "Adductor Brevis", "Adductor Magnus" and "Adductor Longus," all of which are displayed in the picture to the right. Adductor Longus has been cut to display the muscles underneath.

Of these three, it is Adductor Longus that is most susceptible to injury, and the most common place of injury on Adductor Longus is the point at which the muscle and tendon attach to the femur (thigh) bone.

What Causes a Groin Pull?

Competitors that participate in sports that require a lot of running or rapid change in direction are most susceptible to groin injuries. Other activities like kicking, jumping and rapid acceleration or deceleration also place a lot of strain on the groin muscles.

Another activity that puts a lot of strain on the groin is any movement that results in a sudden pressure being applied. Such as a fall, landing awkwardly, twisting, or bending while stress is applied to the groin muscles.

How to Prevent a Groin Pull?

The basis of prevention comes down to two simple factors. A thorough warm-up and physical conditioning, ie: flexibility & strength.

Firstly, a thorough and correct warm up will help to prepare the muscles and tendons for any activity to come.

Secondly, flexible muscles and tendons are extremely important in the prevention of most strain or sprain injuries. When muscles and tendons are tight and stiff, it is quite easy for those muscles and tendons to be pushed beyond their natural range of movement, which can cause strains, sprains, and pulled muscles. To keep your muscles and tendons flexible and supple, it is important to undertake a structured stretching routine.

Stretching is one of the most under-utilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating sprain and strain injury. Don't make the mistake of thinking that something as simple as stretching won't be effective.

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stretching; and how to stretch properly. Click here to learn more about The Stretching Handbook.

And thirdly, strengthening and conditioning the muscles of the groin will also help to prevent groin strain. There are a number of specific strengthening exercises you can do for these muscles, like cable adductions and machine adductions.

A Complete Treatment and Management Plan for Groin Strain

The following is a very thorough and detailed management plan for the full recovery and rehabilitation of a groin strain. As mentioned earlier, it's taken directly from Modern Principles of Athletic Training by Daniel D. Arnheim.

Considering this management plan was written over ten years ago, my only addition would be the reduction of ice therapy and the addition of massage and heat therapy during the 2nd, 3rd, and 4th phase. Regardless of my suggestions, the following will be extremely useful for anyone who is, or has suffered from a groin strain.

Injury Situation

A women varsity basketball player had a history of tightness in her groin. During a game she suddenly rotated her trunk while also stretching to the right side. There was a sudden sharp pain and a sense of "giving way" in the left side of the groin that caused the athlete to immediately stop play and limp to the sidelines.

Symptoms & Signs

As the athlete described it to the athletic trainer, there was severe pain when rotating her trunk to the right and flexing her left hip. Inspection revealed the following:

There was major point tenderness in the groin, especially in the region of the adductor magnus muscle.

There was no pain during passive movement of the hip, but severe pain did occur during both active and resistive motion.

When the groin and hip were tested for injury, the hip joint, illiopsoas, and rectus femoris muscles were ruled out as having been injured; however, when the athlete adducted the hip from a stretch position, it caused here extreme discomfort.

Management Plan

Based on the athletic trainer's inspection, with findings confirmed by the physician, it was determined that the athlete had sustained a second-degree strain of the groin, particularly to the adductor magnus muscle.

Phase 1

Management Phase	Goals: To control hemorrhage, pain and spasms. Estimated Length of Time (ELT): 2 to 3 days.
Therapy	Immediate Care: ICE-R (20 min) intermittently, six to eight times daily. The athlete wears a 6-inch

		elastic hip spica.
	Exercise Rehabilitation	No Exercise - as complete rest as possible.

Phase 2

Management Phase	Goals: To reduce pain, spasm and restore full ability to contract without stretching the muscle. ELT: 4 to 6 days.
Therapy	Follow up care: Ice massage (1 min) three to four times daily. Bipolar muscle stimulation above and below pain site (7 min).
Exercise Rehabilitation	PNF for hip rehabilitation three to four times daily (beginning approx. 6 days after injury) Optional: Jogging in chest level water (10 to 20 min) one or two times daily. Must be done within pain free limits. General body maintenance exercises are conducted three times a week as long as they do not aggravate the injury.

Phase 3

Management Phase	Goals: To reduce inflammation and return strength and flexibility.
Therapy	Muscle stimulation using the surge current at 7 or 8, depending on athlete's tolerance, together with ultrasound once daily and cold therapy in the form of ice massage or ice packs (7 min) followed by light exercise, two to three times daily.
Exercise Rehabilitation	PNF hip patterns two to three times daily following cold applications, progressing to progressive-resistance exercise using pulley, isokinetic, or free weight (10 reps, 3 sets) once daily. Optional: Flutter kick swimming once daily. General body maintenance exercises are conducted three times a week as long as they do not aggravate the injury.

Phase 4

Management Phase	Goals: To restore full power, endurance, speed and extensibility.

Therapy	If symptom free, precede exercise with ice massage (7 min) or ice pack.
Exercise Rehabilitation	Added to phase 3 program, jogging on flat course slowly progressing to a 3-mile run once daily and then progressing to figure-8s, starting with obstacles 10 feet apart and gradually shortening distance to 5 feet, at full speed.

Phase 5

Management Phase	Goals: To return to sport competition.
Exercise Rehabilitation	Athlete gradually returns to pre-competition exercise and a gradual return to competition while wearing a figure-8 elastic hip spica bandage for protection.

Criteria for Returning to Competitive Basketball:

As measured by an isokinetic dynamometer, the athlete's injured hip and groin should have equal strength to that of the uninjured hip.

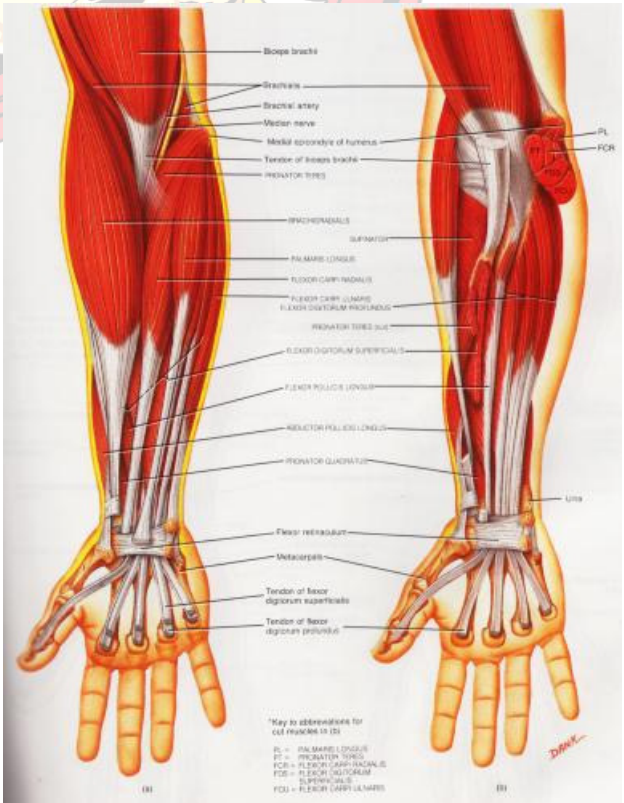
Hip and groin has full range of motion.

The athlete is able to run figure-8s around obstacles set 5 feet apart at full speed.

Golfers Elbow, Elbow Tendonitis and Elbow Pain

A Guide to the Treatment and Prevention of Golfers Elbow!

There are a number of conditions that affect the elbow area. The three most common conditions are "lateral epicondylitis" (tennis elbow), "medial epicondylitis" (golfers elbow), and medial collateral ligament sprain (throwers elbow).



The first two conditions are very similar, however the first affects the outside of the elbow (lateral), and the second affects the inside of the elbow (medial). For the purpose of this newsletter we'll stick with the treatment of medial epicondylitis, or as it is more commonly known, golfers elbow.

What is Golfers Elbow?

Before we can understand just what golfers elbow is, it's important to have a general

understanding of the structure of the elbow joint, and how the muscles, tendons, ligaments and bones help the elbow joint to function.

As you can see from the diagram to the right, there are many muscles and tendons that make up the elbow joint and forearm. The diagram shows the anterior (or front) view of the forearm. The left picture shows the muscles and tendons closest to the surface of the skin, while the picture on the right shows some of the muscles and tendons deeper within the forearm.

There are also three bones which make up the elbow joint. They are the "Humerus," the "Ulna" and the "Radius."

Now that we can see how the elbow functions, lets look at what exactly golfers elbow is.

Golfers elbow occurs when there is damage to the muscles, tendons and ligaments around the elbow joint and forearm. Small tears, called micro tears, form in the tendons and muscles which control the movement of the forearm. They cause a restriction of movement, inflammation and pain. These micro tears eventually lead to the formation of scar tissue and calcium deposits. If untreated, this scar tissue and calcium deposits can put so much pressure on the muscles and nerves that they can cut off the blood flow and pinch the nerves responsible for controlling the muscles in the forearm.

Causes!

By far the most common cause of golfers elbow is overuse. Any action which places a repetitive and prolonged strain on the forearm muscles, coupled with inadequate rest, will tend to strain and overwork those muscles.

There are also many other causes, like a direct injury, such as a bump or fall onto the elbow. Poor technique will contribute to the condition, such as using ill-fitted equipment, like golf clubs, tennis racquets, work tools, etc. While poor levels of general fitness and conditioning will also contribute.

Symptoms!

Pain is the most common and obvious symptom associated with golfers elbow. Pain is most often experienced on the inside of the upper forearm, but can also be experienced anywhere from the elbow joint to the wrist.

Weakness, stiffness and a general restriction of movement are also quite common in sufferers of golfers elbow. Even tingling and numbness can be experienced.

Prevention!

There are a number of preventative techniques which will help to prevent golfers elbow, including bracing and strapping, modifying equipment, taking extended rests and even learning new routines for repetitive activities. However, there are three preventative measures that I feel are far more important, and effective, than any of these.

Firstly, a thorough and correct warm up will help to prepare the muscles and tendons for any activity to come. Without a proper warm up the muscles and tendons will be tight and stiff. There will be limited blood flow to the forearm area, which will result in a lack of oxygen and nutrients for the muscles. This is a sure-fire recipe for a muscle or tendon injury.

Before any activity be sure to thoroughly warm up all the muscles and tendons which will be used during your sport or activity.

Secondly, flexible muscles and tendons are extremely important in the prevention of most strain or sprain injuries. When muscles and tendons are flexible and supple, they are able to move and perform without being over stretched. If however, your muscles and tendons are tight and stiff, it is quite easy for those muscles and tendons to be pushed beyond their natural range of movement. When this happens, strains, sprains, and pulled muscles occur. To keep your muscles and tendons flexible and supple, it is important to undertake a structured stretching routine.

Stretching is one of the most under-utilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating sprain and strain injury. Don't make the mistake of thinking that something as simple as stretching won't be effective.

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And thirdly, strengthening and conditioning the muscles of the forearm and wrist will also help to prevent golfers elbow. There are a number of specific strengthening exercises you can do for these muscles, but instead of me going into the details here, I have simply found another web site that has already done all the hard work.

The following site explains a number of exercises you can do, both with, and without weights, and also includes diagrams and comprehensive explanations of each exercise. Although the site is specifically about tennis elbow, the exercises also relate very well to golfers elbow. You can find these strengthening exercises by going to http://www.physsportsmed.com/issues/1996/05_96/nirscpa.htm.

Treatment!

Golfers elbow is a soft tissue injury of the muscles and tendons around the elbow joint, and therefore should be treated like any other soft tissue injury. Immediately following an injury, or at the onset of pain, the R.I.C.E.R. regime should be employed. This involves Rest, Ice, Compression, Elevation, and Referral to an appropriate professional for an accurate diagnosis.

It is critical that the R.I.C.E.R. regime be implemented for at least the first 48 to 72 hours. Doing this will give you the best possible chance of a complete and full recovery.

The next phase of treatment (after the first 48 to 72 hours) involves a number of physiotherapy techniques. The application of heat and massage is one of the most effective treatments for removing scar tissue and speeding up the healing process of the muscles and tendons.

Once most of the pain has been reduced, it is time to move onto the rehabilitation phase of your treatment. The main aim of this phase is to regain the strength, power, endurance and flexibility of the muscle and tendons that have been injured.

Knee Pain, Knee Injuries and Iliotibial Band Syndrome

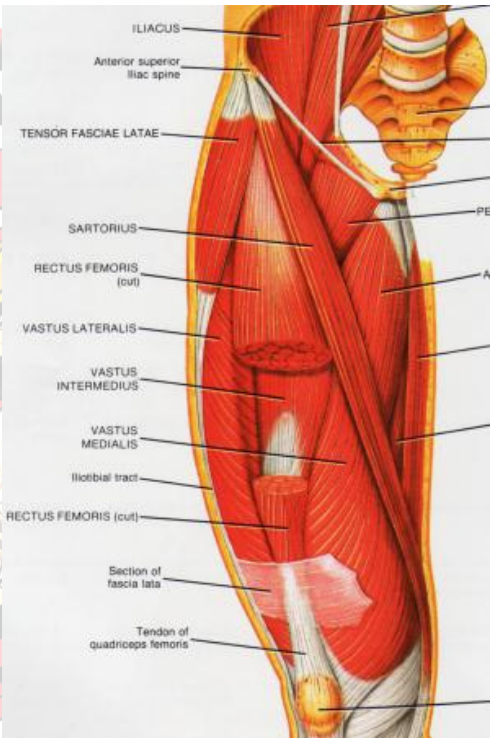
A Guide to the Treatment and Prevention of Knee Injuries and Iliotibial Band Syndrome!

Knee pain and knee injuries, as a result of Iliotibial Band Syndrome, can be an extremely painful and frustrating injury that puts a big strain on both the knee and hip joints.

Knee injuries are very common among runners and cyclists. However, it doesn't usually occur in an instant, like a hamstring strain or groin pull, but commonly starts off as a twinge or niggle, and progresses quickly to a debilitating sports injury that can sideline the best of us for weeks.

For those who aren't familiar with Iliotibial Band Syndrome, let's start by having a look at the muscle responsible for the problem.

The iliotibial band is actually a thick tendon-like portion of another muscle called the tensor fasciae latae. This band passes down the outside of the thigh and inserts just below the knee.



The diagram to the right shows the anterior (front) view of the right thigh muscles. If you look towards the top left of the diagram, you'll see the tensor fasciae latae muscle. Follow the tendon of this muscle down and you'll see that it runs all the way to the knee. This thick band of tendon is the iliotibial band. Or iliotibial tract, as it is labeled in the diagram.

The main problem occurs when the tensor fasciae latae muscle and iliotibial band become tight. This causes the tendon to pull the knee joint out of alignment and rub against the outside of the knee, which results in inflammation and pain.

Causes

There are two main causes of knee pain associated with iliotibial band syndrome. The first is "overload" and the second is "biomechanical errors."

Overload is common with sports that require a lot of running or weight bearing activity. This is why ITB is commonly a runner's injury. When the tensor fasciae latae muscle and iliotibial band become fatigued and overloaded, they lose their ability to adequately stabilize the entire leg. This in-turn places stress on the knee joint, which results in pain and damage to the structures that make up the knee joint.

Overload on the ITB can be caused by a number of things. They include:

- Exercising on hard surfaces, like concrete;
- Exercising on uneven ground;

- Beginning an exercise program after a long lay-off period;
- Increasing exercise intensity or duration too quickly;
- Exercising in worn out or ill fitting shoes; and
- Excessive uphill or downhill running.
- Biomechanical errors include:
- Leg length differences;
- Tight, stiff muscles in the leg;
- Muscle imbalances;
- Foot structure problems such as flat feet; and
- Gait or running style problems such as pronation.

Immediate Treatment

Firstly, be sure to remove the cause of the problem. Whether it be an overload problem, or a biomechanical problem, make sure steps are taken to remove the cause.

The basic treatment for knee pain that results from ITB Syndrome is no different to most other soft tissue injuries. Immediately following the onset of any knee pain, the R.I.C.E.R. regime should be applied. This involves Rest, Ice, Compression, Elevation, and Referral to an appropriate professional for an accurate diagnosis. It is critical that the R.I.C.E.R. regime be implemented for at least the first 48 to 72 hours. Doing this will give you the best possible chance of a complete and full recovery.

Ongoing Treatment and Prevention

Although the pain may be felt mainly in the knee, the problem is actually caused by the muscles that support the knee. Namely the tensor fasciae latae and the large muscle at the rear of your upper leg, called the gluteus maximus.

Other muscles in the lower back, hip, backside and upper leg also affect the function of the knee, so it's important to pay attention to all these muscles. After the first 48 to 72 hours, consider a good deep tissue massage. It may be just what you need to help loosen up those tight muscles.

Firstly, don't forget a thorough and correct warm up will help to prepare the muscles and tendons for any activity to come. Without a proper warm up the muscles and tendons will be tight and stiff. There will be limited blood flow to the leg muscles, which will result in a lack of oxygen and nutrients for those muscles.

Before any activity be sure to thoroughly warm up all the muscles and tendons that will be used during your sport or activity.

Secondly, flexible muscles are extremely important in the prevention of most leg injuries. When muscles and tendons are flexible and supple, they are able to move and perform without being over stretched. If however, your muscles and tendons are tight and stiff, it is quite easy for those muscles and tendons to be pushed beyond their natural range of movement. To keep your muscles and tendons flexible and supple, it is important to undertake a structured stretching routine.

The stretch to the right is one of the best stretches for the tensor fasciae latae.

Stand upright and cross one foot behind the other. Then lean towards the foot that is behind the other. Hold this stretch for about 15 to 20 seconds, and then repeat it 3 to 4 times on each leg.

Stretching is one of the most under-utilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating sprain and strain injury. Don't make the mistake of thinking that something as simple as stretching won't be effective.

For an easy-to-use, quick reference guide of 135 clear photographs of every possible stretching exercise, for every major muscle group in your body, get a copy of The Stretching Handbook. You'll also learn the benefits of flexibility; the rules for safe stretching; and how to stretch properly. Click here to learn more about The Stretching Handbook.

And thirdly, strengthening and conditioning the muscles around your knee and upper leg will help greatly to reduce the chance of knee injury and knee pain.

If you are in too much pain to resume normal exercise, consider swimming, deep water exercise, or maybe cycling. Otherwise, the following web site, http://www.thewalkingsite.com/knee_exercises.html has a list of simple, easy strengthening exercises for the muscles of the upper leg and knee. To keep your knees in tip-top condition practice these regularly.

Shin Splints

Shin Splints are one of the most common injuries known to athletes.

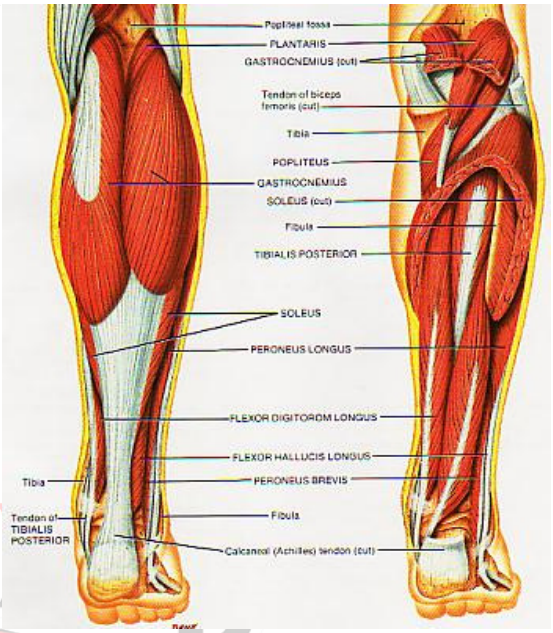
Shin splints are a term commonly used to describe most lower leg pain. However, shin splints are only one of several conditions that affect the lower leg. The most common causes of lower leg pain are: general shin soreness; shin splints; and stress fractures. For the purpose of this article, I'll only be addressing the first two. I'll save the topic of stress fractures for another issue.

Before I move on to shin splints, I want to quickly cover the topic of general shin soreness. Shin soreness is simply a muscular overuse problem. By using the R.I.C.E.R. regime outlined in a previous issue of The Stretching & Sports Injury Newsletter, you'll be able to overcome 95 percent of all general shin soreness within about 72 hours.

For lower leg pain that goes beyond general shin soreness, a more aggressive approach must be taken. Let’s now have a look at shin splints in a little more detail.

What are Shin Splints?

Although the term shin splints is often used to describe a variety of lower leg problems, it actually refers specifically to a condition called Medial Tibial Stress Syndrome (MTSS). To better understand shin splints, or MTSS, let's have a look at the muscles, tendons and bones involved.



As you can see from the diagram to the right, there are many muscles and tendons that make up the lower leg, or calf region. It's quite a complex formation of inter-weaving and over-crossing muscles and tendons.

The main components of the lower leg that are affected by the pain associated with shin splints are:

The Tibia and Fibula. These are the two bones in the lower leg. The tibia is situated on the medial, or inside of the lower leg. While the fibula is situated on the lateral, or outside of the lower leg.

There are also a large number of the muscles that attach to the tibia and fibula. It's these muscles, when overworked, that pull on the tibia and fibula and cause the pain associated with shin splints.

Specifically, the pain associated with shin splints is a result of fatigue and trauma to the muscle's tendons where they attach themselves to the tibia. In an effort to keep the foot, ankle and lower leg stable, the muscles exert a great force on the tibia. This excessive force can result in the tendons being partially torn away from the bone.

What Causes Shin Splints?

While there are many causes of shin splints, they can all be categorized into two main groups. Overload (or training errors), and Biomechanical Inefficiencies.

Overload (or training errors): Shin splints are commonly associated with sports that require a lot of running or weight bearing activity. However, it is not necessarily the added weight or force applied to the muscles and tendons of the lower leg, but rather the impact force associated with running and weight bearing activities.

In other words, it's not the running itself, but the sudden shock force of repeated landings and change of direction that causes the problem. When the muscles and tendons become fatigued and overloaded, they lose their ability to adequately absorb the damaging shock force.

Other overload causes include:

- Exercising on hard surfaces, like concrete;
- Exercising on uneven ground;
- Beginning an exercise program after a long lay-off period;

- Increasing exercise intensity or duration too quickly;
- Exercising in worn out or ill fitting shoes; and
- Excessive uphill or downhill running.

Biomechanical Inefficiencies: The major biomechanical inefficiency contributing to shin splints is that of flat feet. Flat feet lead to a second biomechanical inefficiency called over-pronation. Pronation occurs just after the heal strikes the ground. The foot flattens out, and then continues to roll inward.

Over-pronation occurs when the foot and ankle continue to roll excessively inward. This excessive inward rolling causes the tibia to twist, which in-turn, over stretches the muscles of the lower leg.

Other biomechanical causes include:

- Poor running mechanics;
- Tight, stiff muscles in the lower leg;
- Running with excessive forward lean;
- Running with excessive backwards lean;
- Landing on the balls of your foot; and
- Running with your toes pointed outwards.

How to Prevent Shin Splints!

Prevention, rather than cure, should always be your first aim. I was very surprised when researching this topic at the number of articles that totally neglected any mention of preventative measures. They all talked of treatment and cure, but only one out of twenty took the time to address the issue of prevention in any detail.

Even before any sign of shin soreness appears there are a number of simple preventative measures that can be easily implemented.

Since about half of all lower leg problems are caused by biomechanics inefficiencies, it makes sense to get the right advice on footwear. Your feet are the one area you should not "skimp" on. The best advice I can give you concerning footwear is to go and see a qualified podiatrist for a complete foot-strike, or gait analysis. They will be able to tell you if there are any concerns regarding the way your foot-strike or gait is functioning.

After your foot-strike has been analyzed, have your podiatrist, or competent sports footwear sales person recommend a number of shoes that suit your requirements. Good quality footwear will go a long way in helping to prevent many lower leg problems.

Apart from good footwear, what else can you do? I believe the following three preventative measures are not only very effective, but crucial.

Firstly, a thorough and correct warm up will help to prepare the muscles and tendons for any activity to come. Without a proper warm up the muscles and tendons will be tight

and stiff. There will be limited blood flow to the lower legs, which will result in a lack of oxygen and nutrients for those muscles.

Before any activity be sure to thoroughly warm up all the muscles and tendons that will be used during your sport or activity.

Secondly, flexible muscles are extremely important in the prevention of most lower leg injuries. When muscles and tendons are flexible and supple, they are able to move and perform without being over stretched. If however, your muscles and tendons are tight and stiff, it is quite easy for those muscles and tendons to be pushed beyond their natural range of movement. To keep your muscles and tendons flexible and supple, it is important to undertake a structured stretching routine.

Stretching is one of the most under-utilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating sprain and strain injury. Don't make the mistake of thinking that something as simple as stretching won't be effective.

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And thirdly, strengthening and conditioning the muscles of the lower leg will also help to prevent shin splints. There are a number of specific strengthening exercises you can do for these muscles, but instead of me going into the details here, I have simply found another web site that has already done all the hard work. It explains a number of exercises you can do for preventing shin splints. You can find these strengthening exercises by going to http://www.waltxc.com/TF/TF%20Education/shin_splints.htm.

The above-mentioned article is the only other article I found that included a comprehensive section on shin splint prevention. If you're only interested in the strengthening exercises, you'll find them towards the end of the article. If however, you suffer from shin splints or you're looking for more information on shin splints, I recommend you read the entire article.

How to Treat Shin Splints!

Firstly, be sure to remove the cause of the problem. Whether it be a biomechanical problem, or an overload problem, make sure steps are taken to remove the cause.

The basic treatment for shin splints is no different to most other soft tissue injuries. Immediately following the onset of any shin pain, the R.I.C.E.R. regime should be applied. This involves Rest, Ice, Compression, Elevation, and Referral to an appropriate professional for an accurate diagnosis. It is critical that the R.I.C.E.R. regime be implemented for at least the first 48 to 72 hours. Doing this will give you the best possible chance of a complete and full recovery.

The next phase of treatment (after the first 48 to 72 hours) involves a number of physiotherapy techniques. The application of heat and massage is one of the most effective treatments for speeding up the healing process of the muscles and tendons.

I have found both from personal experience and from working with many clients, that this form of treatment is the most effective. The application of heat and deep tissue massage on the effected area seems to bring the best results. If you suffer from shin splints, be sure to spend at least a few minutes massaging the effected area both before and after you exercise.

Once most of the pain has been reduced, it is time to move onto the rehabilitation phase of your treatment. The main aim of this phase is to regain the strength, power, endurance and flexibility of the muscle and tendons that have been injured.

Tennis Elbow

A Guide to the Treatment and Prevention of Tennis Elbow!

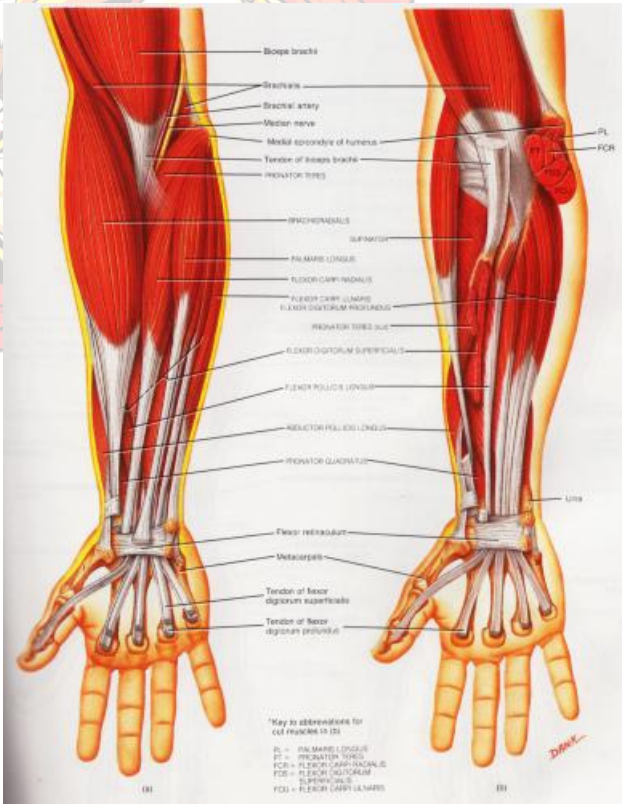
Tennis Elbow is currently one of the most diagnosed conditions in the western world. It is extremely common, and can be excruciatingly painful.

There are a number of conditions that affect the elbow area. The three most common conditions are "lateral epicondylitis" (tennis elbow), "medial epicondylitis" (golfers elbow), and medial collateral ligament sprain (throwers elbow).

The first two conditions are very similar, however the first affects the outside of the elbow (lateral), and the second effects the inside of the elbow (medial). For the purpose of this newsletter we'll stick with the treatment of lateral epicondylitis, or as it is more commonly known, tennis elbow.

What is Tennis Elbow?

Before we can understand just what tennis elbow is, it's important to have a general understanding of the structure of the elbow joint, and how the muscles, tendons, ligaments and bones help the elbow joint to function.



As you can see from the diagram to the right, there are many muscles and tendons that make up the elbow joint and forearm. The diagram shows the anterior (or front) view of the forearm. The left picture shows the muscles and tendons closest to the surface of the skin, while the picture on the right shows some of the muscles and tendons deeper within the forearm.

There are also three bones which make up the elbow joint. They are the "Humerus," the "Ulna" and the "Radius."

Now that we can see how the elbow functions, lets look at what exactly tennis elbow is.

Tennis elbow occurs when there is damage to the muscles, tendons and ligaments around the elbow joint and forearm. Small tears, called micro tears, form in the tendons and muscles which control the movement of the forearm. They cause a restriction of movement, inflammation and pain. These micro tears eventually lead to the formation of scar tissue and calcium deposits. If untreated, this scar tissue and calcium deposits can put so much pressure on the muscles and nerves that they can cut off the blood flow and pinch the nerves responsible for controlling the muscles in the forearm.

Causes

By far the most common cause of tennis elbow is overuse. Any action which places a repetitive and prolonged strain on the forearm muscles, coupled with inadequate rest, will tend to strain and overwork those muscles.

There are also many other causes, like a direct injury, such as a bump or fall onto the elbow. Poor technique will contribute to the condition, such as using ill-fitted equipment, like tennis racquets, golf clubs, work tools, etc. While poor levels of general fitness and conditioning will also contribute.

Symptoms

Pain is the most common and obvious symptom associated with tennis elbow. Pain is most often experienced on the outside of the upper forearm, but can also be experienced anywhere from the elbow joint to the wrist.

Weakness, stiffness and a general restriction of movement are also quite common in sufferers of tennis elbow. Even tingling and numbness can be experienced.

Prevention

There are a number of preventative techniques which will help to prevent tennis elbow, including bracing and strapping, modifying equipment, taking extended rests and even learning new routines for repetitive activities. However, there are three preventative measures that I feel are far more important, and effective, than any of these.

Firstly, a thorough and correct warm up will help to prepare the muscles and tendons for any activity to come. Without a proper warm up the muscles and tendons will be tight and stiff. There will be limited blood flow to the forearm area, which will result in a lack of oxygen and nutrients for the muscles. This is a sure-fire recipe for a muscle or tendon injury.

Before any activity be sure to thoroughly warm up all the muscles and tendons which will be used during your sport or activity.

Secondly, flexible muscles and tendons are extremely important in the prevention of most strain or sprain injuries. When muscles and tendons are flexible and supple, they are able to move and perform without being over stretched. If however, your muscles and tendons are tight and stiff, it is quite easy for those muscles and tendons to be pushed beyond their natural range of movement. When this happens strains, sprains, and pulled muscles occur. To keep your muscles and tendons flexible and supple, it is important to undertake a structured stretching routine.

Stretching is one of the most under-utilized techniques for improving athletic performance, preventing sports injury and properly rehabilitating sprain and strain injury.

Don't make the mistake of thinking that something as simple as stretching won't be effective.

And thirdly, strengthening and conditioning the muscles of the forearm and wrist will also help to prevent tennis elbow. There are a number of specific strengthening exercises you can do for these muscles, but instead of me going into the details here, I have simply found another web site that has already done all the hard work. It explains a number of exercises you can do, both with, and without weights, and also includes diagrams and comprehensive explanations of each exercise. You can find these strengthening exercises by going to http://www.physsportsmed.com/issues/1996/05_96/nirscpa.htm.

Treatment

Tennis elbow is a soft tissue injury of the muscles and tendons around the elbow joint, and therefore should be treated like any other soft tissue injury. Immediately following an injury, or at the onset of pain, the R.I.C.E.R. regime should be employed. This involves Rest, Ice, Compression, Elevation, and Referral to an appropriate professional for an accurate diagnosis.

It is critical that the R.I.C.E.R. regime be implemented for at least the first 48 to 72 hours. Doing this will give you the best possible chance of a complete and full recovery.

The next phase of treatment (after the first 48 to 72 hours) involves a number of physiotherapy techniques. The application of heat and massage is one of the most effective treatments for removing scar tissue and speeding up the healing process of the muscles and tendons.

Once most of the pain has been reduced, it is time to move onto the rehabilitation phase of your treatment. The main aim of this phase is to regain the strength, power, endurance and flexibility of the muscle and tendons that have been injured.

4.) Nutrition

The Scientific Approach to a Healthy Body

Getting the proper nutrition is imperative to achieving a healthier lifestyle. It doesn't matter what your sex, age, occupation or hobbies, the same fundamentals of nutrition serve as a basis for good health now and in the future.

Before we can begin to improve your eating habits, we will need to address a few principles that will help you understand the food selections we recommend. These sections are:

- The Glycemic Index and Blood Sugar Levels
- Macronutrition
- Carbohydrates
- Proteins
- Fat
- Water
- Nutritional Supplementation

The Glycemic Index and Blood Sugar Levels

It appears today that "fat-free" food and diets are perceived to be the silver bullet in battle against fat. What John Q Public doesn't realize is that the human body does not automatically burn "fat-free" food into energy. The rate at which food releases sugar into the blood stream determines whether the body will store the food as fat. The rate at which carbohydrates release glucose into the blood, the higher the chances are of it being stored as fat. Here's the scary part, you can eat something that is low in fat or even "fat-free", but you may still end up with excess body fat!

To help your body in the fat-storing (or lack of) process, you need to understand the Glycemic index (GI). The GI basically indicates the rate at which foods is broken down into simple sugar and appears in the blood stream. High GI index foods release sugar quickly into the blood, causing a rapid rise in blood sugar. Following this section there will be table with some select food and their GI values. Eating too many high GI valued foods can lead to an increase in body fat, especially without regular exercise.

Low GI foods release sugar into the blood slowly and do not cause a rapid rise in blood sugar, thus providing sustained energy and little fat storage. Low GI foods a better and healthier to eat as they are less likely to be stored as fat.

Benefits of a Low GI Diet

- Helps control established diabetes
- Allows your insulin to work more effectively
- May help prevent middle-ages people from developing diabetes and heart disease
- Helps weight loss by reducing the food craving and storing lass food as fat
- Helps maintain stable energy levels

Tips for Following a Low GI Diet

- Eat 5 – 6 small meals per day
- Eat mainly low GI foods, or combine high GI food with low GI food to help reduce the overall GI of the meal
- Eat the correct ratio of macronutrients: carbohydrates, protein and fat. This will be discussed latter
- Adding protein, fiber and fat (good fat) can lower the GI of a meal
- Making sure any supplemental food is certified as low Glycemic

Macronutrition

There are a wide variety of diets available to choose from. There's the 'The Zone', 'Atkins', 'Lean Bodies' and a myriad of others. Some advocate eating almost no protein or fats, restricting you to carbohydrates only. Others favor only protein and fat with little to no carbohydrates. Because these diets allow you to eat many of your favorite food they are getting a lot of attention.

However, these are fad diets and designed for dangerously rapid, and many times, short-term weight, not fat, loss. These diets are not conducive to long-term good health. WARRIOR FITNESS TRAINING advocates a balance of the right kind of macronutrients.

- **The Right Balance:**

Achieving a proper balance of macronutrients requires eating the right amounts of carbohydrates, proteins and fat. WARRIOR FITNESS TRAINING recommends a balanced diet consisting of 30 – 40 % protein, 40 – 60 % carbohydrates and 10 – 20 % fat.

- **The Right Kinds:**

The key to eating the right kinds of foods is to eat fewer foods with a high GI and more foods with a low GI. As long as you are eating foods from the WARRIOR FITNESS TRAINING Approved and Conditional food list, you can be assured that you are eating mainly low GI foods.

A WARRIOR FITNESS TRAINING food list will be included at the end of the nutrition section.

Carbohydrates

Increased energy is only one of the many benefits you'll experience by following the WARRIOR FITNESS TRAINING nutrition program. Carbohydrates are the body's primary source of energy, and the best ways to ensure that you will increase your energy level long-term.

It's important to note the eating the wrong balance and types of carbohydrates is deceiving, because they do provide you energy. But, the energy that comes from these "empty calories" only lasts short-term –like a sugar rush—and actually makes you fell more tires in the end.

When trying to decide between desirable and undesirable carbohydrates, follow this WARRIOR FITNESS TRAINING rule: Foods that are closest to their natural state are more likely to fall into the desirable category then those that have been processed.

Proteins

If you want to turn your body into a far burning furnace, then protein is the key! Protein contains amino acids, which are building blocks the body uses for growth and repair. Without protein, your organs, hair, nails, immune system and every other bodily system would not survive.

Consuming the right kinds and amounts of proteins, along with a good exercise program, helps you build more muscle, which results in burning more calories, and fat! When we talk about building muscle, we're not describing major body building, although that's okay too. What we are talking about is building the muscles you use every day for normal functionality, as well as those utilized in your exercise program. The muscle is the furnace in which fat is burned, so the more muscle you have the more fat you burn. But don't worry it takes years and years of dedicated hard work to get as big as most professional body builders. The WARRIOR FITNESS TRAINING program will ultimately result in helping you reach your ideal weight and increase your energy level.

Refer to the Approved WARRIOR FITNESS TRAINING food table for ideal protein sources.

FAT

Of all the macronutrients, fat is the most difficult to welcome into our diet. This mainly due to the negative connotation associated with fat propagated by media.

The important thing to know is that getting the right kinds and amount of fat is not only essential to achieving a balanced diet, but also can benefit you as follows:

- It provides a more concentrated form of energy than carbohydrates
- It supplies the body with essential fatty acids needed for growth and tissue repair

While consuming too much fat can lead to major health problems, eating "healthy fats" can help you achieve a balanced diet and increase you energy level and assist in losing body fat!

Refer to the Approved Warrior Fitness Training food list for the proper types of fat.

Water

While it is important to maintain a balanced diet that includes carbohydrates, protein and fat, it is imperative that you supplement your diet with water! You can survive long periods of time without food, but several days without water can be deadly. WARRIOR FITNESS TRAINING recommends from 8-10 cups of water per day for the average female and 10-12 for the average male. Depending upon climate and exercise frequency these recommendations can vary. To be on the safe side drink 8 cups of water daily, with and additional 2-4 cups consumed in other foods or beverages.

Nutrition – It's More Then You Think!

I'd like to thank Dr John M Berardi, CSCS for the following nutrition information.

Dr. Berardi has earned a doctoral degree from the University of Western Ontario (2005) with a specialization in the area of exercise biology and nutrient biochemistry. Prior to his doctoral studies, Dr. Berardi studied Exercise Science at Eastern Michigan University (Masters program; 1999) as well as Health Science, Psychology, and Philosophy at Lock Haven University (Undergraduate program; 1997).

Throughout, Dr. Berardi's research has focused on the interaction between nutrition, sports supplementation, and exercise performance. This research has led to the publication of 8 scientific abstracts, 12 scientific papers and textbook chapters, and over a dozen presentations at scientific meetings. Further, Dr. Berardi has taught college courses in Strength Training, Exercise Science, Laboratory Techniques in Exercise Science, Nutrient Metabolism, Fitness and Wellness, and Exercise Nutrition. Currently, Dr. Berardi is an adjunct professor of Exercise Science at the University of Texas at Austin

Making Healthy Eating Work - Food Preparation Strategies

Most people nowadays know at least the basics of what they should eat and what they should avoid to improve their health, their body composition, and their performance. Yet most people are overweight and/or obese.

So what's the problem? Where's the disconnect? Why is it so hard for them to make the change? Well, unless they really don't want to change, the two biggest impediments to their success are:

1.Their habits — or their ingrained set of day to day food and activity related actions — remain poor because they don't have a conscious, logical plan for changing them.

2. They aren't ready for the tough times. Things might be getting better; then the tough times hit. They "get busy". Eating well becomes inconvenient. No one else supports their decision to make a change. When these inevitable circumstances come up, they bail. Habits are more powerful than momentary desire. Habits are more powerful than information. Habits are more powerful than guilt. And only a concerted, conscious effort to override habits will lead to success.

So, in some respects, better nutrition is more about altering lifestyle habits and less about the food. Sure, you've gotta know which foods are good to eat and plan to eat them. But, as GI Joe once said, knowing is half the battle. Even if you know what's good and expect to eat good foods, if the good foods aren't around when it's time to eat, you're doomed. In other words, preparation is the other half. Here are my top food preparation strategies to ensure you win the other half of the battle – the doing part.

Strategy #1 — The Sunday Ritual
No, no, this ritual doesn't include lamb's blood or any special Kool Aid. The Sunday Ritual is performed by setting aside 3 hours or so every Sunday (any day of the week will do but Sunday is easiest for most) to write out your menu for the week, shop for the week, and prepare your meals for the week.

First, on your Ritual day, sit down and come up with your meal plan for the week. It should only take a few minutes to lay out 7 different breakfast meals, 7 different lunch meals, 7 different dinner meals, and 2-3 additional snacks for each day.

Next, once the meal plan is laid out, add up exactly how much of each food you'll need over the 7 days and go pick those foods up at the grocery store.

Finally, once you've got all those groceries home, it's time to start cooking for the week. Some people choose to prepare all their meals for the week on Sundays (excluding shakes). Others prefer to figure out which meals will be easy to cook just prior to meal time and save them for later, preparing only the meals that will need to be eaten during work hours or during busy times of the day when food prep becomes difficult.
For example, some people can easily prepare breakfast meals and dinner meals on demand by setting aside a few minutes each day for meal preparation. Others have a significant other who can prepare these meals for them. Either way, these meals can probably wait until they are needed. However the lunches, 2-3 daytime snacks, and workout shakes usually present a problem for the unprepared so they should be made in advance. Sunday is a good time for most to do this preparation.

So, if it suits your lifestyle, use the Sunday ritual to get these meals ready for the week. Cook all the meat, chop all the vegetables, measure out all the yogurt and/or cottage cheese, and distribute all the powders. Have them ready and set aside so that you can grab them in the morning and bring them with you regardless of what your day or your boss holds in store for you.

Strategy #2 — The Breakfast Ritual
Rather than preparing all their food for the week on a single day, some people prefer to do a little food preparation each day. That's what the Breakfast Ritual is for.
Using the Breakfast Ritual, simply perform all your cooking for the day each morning. Since you've got to prepare breakfast anyway, make sure you've got a couple of meals going while breakfast is being prepared. Again, this need not be a huge production. I can prepare all my meals for the day with a max prep time of 30 minutes.

Of course, as with the Sunday ritual, think about what your day will hold under both the best conditions (i.e. home from work early and a relaxing evening ahead) and the worst

(i.e. unexpected deadline, all nighter at work, long day at work and soccer practice for the kids) and act like a boy scout — be prepared.

One great strategy for being prepared is to bring both the meals you expect to eat as well as some "back-up" options, just in case. So, as discussed earlier, even if you expect to grab lunch at TGI Fridays and have dinner at home, bring with you both a lunch alternative and a dinner alternative, just in case something else comes up. If you don't need the meals, that's fine — just eat them another day. But if you do need them, you can chow down without skipping a meal or choosing a poor alternative.

Here's another idea for you. If you don't want to bring several full meals that you're unlikely to eat, another great option is to bring some homemade snacks with you. Things like homemade protein/energy bars are a fantastic alternative to the mostly crappy, store bought, sugar laden, artificial ingredient containing, protein bars.

Strategy #3 — Have Others Cook For You

If you love the idea of having 5-6 ready made meals always available yet can't see yourself using the Sunday or the Breakfast Rituals above or buying all the Tupperware, there are a number of options at your disposal.

First, you can hire commercial food preparation services to do all the cooking for you. If you're anywhere near a metropolitan area, you'll be able to find dozens to choose from. The two biggies nowadays are Atkins At Home (Atkins Diet) and Zone Nation (The Zone Diet). The Atkins At Home company delivers 3 meals and 1 snack to your door by 6 AM each morning. The cost of this is between $35 and $40 per day. Alternatively, the Zone Nation Company delivers 3 meals and 2 snacks to your door by 6 AM each morning for the cost of $35-40 per day, just like the Atkins Company. I hear good things about both services.

Now, if you're not interested in supporting the Atkins or Zone programs, there are many smaller companies who can assist you with your meal preparation needs. For example, when I lived in Miami Beach I found a local woman who provided this very service for $5 per meal. Every day for lunch she brought me an 8oz chicken or turkey breast, a baked potato or serving of rice, and a large serving of steamed veggies. Other days, I'd have her bring me 2-3 meals just like this.

Here's another tip. Pick 4 restaurants in your immediate area (2 fast food places, 1 medium-priced restaurant, and 1 higher priced restaurant) that prepare meals in a way that conforms to your nutritional plan and have them prepare the food for you when necessary. Of course, you'll have to do a little research on your potential eateries by collecting hard copies of their menus or visiting their web sites (if they're online).
If you're looking for a few examples, here ya go. Dave Thomas' Wendy's makes a couple of tasty chicken salads and a chili that you can eat when on the go. Even McDonalds is offering healthier meal selections — I'm lovin' it.

Choose healthier fast food meals that conform to your meal plan when you don't have much time or much money for a meal and choose a medium-priced restaurant like TGI Fridays (US) or Kelsey's (Canada) for a better quality menu to provide you with a solid daily lunch. TGI Fridays, for example, has a great list of Atkins-friendly selections.

Finally, choose higher priced restaurants if it's time for a power lunch to impress colleagues. Since most people don't really know where they want to go eat anyway, if you get roped into a business lunch, you can be the one to make the definitive decision as to where the group is going to eat. Your decisiveness will win you big points with colleagues and you'll also be able to control your eating habits.

Of course, if you don't have the resources to entertain strategy #3 and pay others to cook for you, consider the fact that if you use the first two strategies to effectively build a lean, muscular body, you might just be able to convince attractive members of the opposite sex to take over for you. However, getting them to drop them off at your place by 6 AM every morning is a trick I'll teach you in a later article.

In the end, whether you choose to regularly prepare your own meals by using the Rituals described above or you regularly choose to have others prepare your meals for you, circumstances will arise in which you'll have to "cross over" and use a different strategy than you usually use. It never ceases to amaze me how much time those interested in health and fitness spend seeking out "the perfect plan" and how little time they spend figuring out what they'll do when life's circumstances prevent them from following it.
Side Note: Food Support Systems

In order to make the Sunday Ritual and the Breakfast Ritual work, it's important to pick up a few items — nutritional support systems, if you will. Here's what we recommend picking up before you start using either of the two Rituals:

A good countertop grill. Since you'll most likely need to cook relatively large batches of lean protein, it's important to have a quick way of doing this. If you've got a great backyard grill that you can use year-round that's great. If not, pick up a Foreman or Hamilton Beach grill and you'll be all set.

A good cooler in which to store and carry your meals for the day. Coleman makes a few good ones. Before buying one, however, make sure there's enough room to carry a few meals and a few shaker bottles.

5 small Tupperware-type containers. These containers will be for storing and transporting your daily meals. Make sure they are small enough to fit into your cooler but large enough to accommodate a full meal. Your choice of glass or plastic is up to you.

5 large Tupperware-type containers. These containers are for storing larger quantities of food. For instance, if you chop your veggies for the week or cook all your chicken breasts for the week, store them in one of these. Again, your choice of glass or plastic is up to you.

3 Rubbermaid Chuggable drink containers — 1L size. These containers are for your liquid supplements. Be sure to choose the blue top variety as these are far and away the best drink containers out there. Most others leak.

Follow the guidelines in this article and you'll be able to display the adaptability necessary to move from nutritional novice to "seasoned" nutritional veteran.

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From North American to Nutritious

by Dr John M Berardi, CSCS

Good nutrition, nutrition for optimal body composition (fat loss, muscle gain), optimal health, and optimal performance (sports or everyday) usually requires a move away from the typical North American dietary habits and a move toward more nutritious, physiology-friendly habits.

To shed a little bit of light on what I mean by the typical North American Diet, let's consider for a moment how the average North American lives each nutritional day.

1. Our typical North American wakes up too close to when they've gotta go, leaving little time to prepare, eat, and digest a good meal before work (whether "work" is an office job or it's training for sport). Also, our typical North American complains that they're "not hungry" in the morning.

2. Our typical North American opts for scarfing down a quick, fast digesting breakfast that's low in calories, missing a significant protein portion, low in micronutrients and phytochemicals, low in good fats, and rich in processed, high glycemic index carbohydrates.

3. Our typical North American heads to work relatively poorly fed.

4. Our typical North American is fairly inconsistent with his/her mid-morning snacks. Also, "snack" usually means more processed carbs and sugar without much in the way of fruits and veggies, quality protein, or good fats.

5. Our typical North American, during his/her lunch break, opts for a small amount of protein (a couple of slices of lunch meat and cheese) between a few slices of processed bread. So again, we're stuck with low protein, low fruit and veggie intake, and very little good fats.

6. Our typical North American is fairly inconsistent with his/her mid-afternoon snacks. Also, "snack" usually means more processed carbs and sugar without much in the way of fruits and veggies, quality protein, or good fats.
7. Assuming dinner is eaten at home, after work, our typical North American has a decent, nutritionally balanced dinner with a good protein source, good carbohydrates, their first larger fruit and veggie portion of the day, and perhaps

even some good fats if they've included olive oil or other sources of monounsaturated or polyunsaturated fats.

8. After their evening activities, our typical North American is inconsistent with their pre-bed snacks. These snacks, if they do eat them, usually are the worst of the day, consisting of larger servings of sweets or processed foods.

So, what's wrong with this type of intake?

1. Breakfast has been shown to be a critical daily meal. After a catabolic overnight fast, a balanced breakfast helps to regulate blood sugar, helps to regulate energy balance, and helps to control late-day cravings that lead to overfeeding on processed, high fat, and high sugar foods. In both cases above, breakfast is either a very small feeding or is completely non-existent. This needs to change.

2. The bulk of total dietary energy is distributed later in the day. What this means is that hourly energy balance is hugely negative in the morning, and positive in the evening.

3. Studies at Georgia State University demonstrate that hourly energy balance is at least as important as total daily energy balance and should remain as close to neutral as possible throughout each of the 24 hours. This means a better distribution of calories throughout the entire day – not just loading up on a big dinner.
4. In the case of our example above, by lunch our individual is likely underfed in total and often underfed in protein. As discussed above, energy intake needs to be better distributed through the day.

5. Fruit and veggie intake, as well as protein intake, is very low until dinnertime. Just as total calorie distribution should be spread evenly throughout the day, so should macronutrient (protein, carb, fat) and micronutrient intake.

6. With blood amino acid concentrations low from the overnight fast and continually low throughout the early day (especially if the morning has two training sessions), catabolic conditions will predominate in the body, making recovery from and adaptation to exercise difficult without a higher morning and early afternoon protein intake.

7. Throughout the morning and afternoon, vitamin and mineral intake as well as dietary antioxidant intake is quite low, creating a deficit that'll be hard to make up later in the day.

8. A fair number of athletes and recreational exercisers have been shown to be deficient in a host of vitamins and minerals, leading to impairments in nervous system function, metabolic processing, and oxygen delivery/consumption. It's hard to get the requisite amount of vitamins and minerals in only one or two meals. Now, this doesn't mean that folks should start popping multi-vitamins. It

means they need to get more fruits and vegetables as well as other micronutrient dense foods with every feeding, not just with one or two feedings per day.

9. Many individuals who don't actively pay attention to their protein intake tend to get too little protein for optimal recovery, preservation of lean body mass, and for the metabolic advantages associated with higher protein intake. Even many of the athletes I regularly work with would benefit from a higher protein intake.

10. Now, this doesn't mean at the expense of good carbs and good fats. It's in addition to those things. Most folks are getting a good, high protein dinner, but it's difficult to take in enough total protein in only one or two protein rich meals. (Nor is it advisable.)

11. For both the physically active and even the sedentary individuals discussed above, dietary fat intake is usually out of balance in favor of saturated fat. Without actively choosing foods and supplements that contain mono and polyunsaturated fatty acid, fat balance is unfavorable. In our example above, our typical North American isn't getting enough good fats.

12. With most of the meals above being rich in simple, processed carbs, the hormone insulin isn't well-controlled. This means that individuals predisposed to fat gain will have a more difficult time controlling and/or losing body fat, even with higher training volumes.

13. With most of the meals above being rich in simple, low-fiber carbs, not enough dietary fiber is being ingested. This may mean constipation, poor blood sugar regulation, and poor GI health.

14. Our individual above isn't actively taking advantage of the post-exercise improvement in insulin sensitivity and boost in post-exercise protein synthesis by eating carb and amino acid-rich foods right after exercise (assuming they have exercised).

15. With all of these dietary limitations, it should be clear that although these individuals aren't dying of malnutrition, they're certainly not laying the groundwork for great body composition, health and performance. So let's talk about how to transition from the average diet to a nutritious one.
    - Step 1: Improve Workout and Post-Workout Nutrition
    - Step 2: Improving and Scheduling Breakfast Meals
    - Step 3: Adding good fats
    - Step 4: Improving lunch meals
    - Step 5: Improving dinner meals
    - Step 6: Increasing veggie (and fruit) intake
    - Step 7: Improve snacks.

Hopefully the message of this article has become clear. Whether you're a high level competitive athlete or just a recreational exerciser, eating like the typical North American is bad, bad news. And despite your exercise habits, eating this way might have you ending up looking more like the typical North American than you want.

To avoid making the same mistakes other North Americans make, it's important that you view each meal or snack as an opportunity to get a good balance of nutrition. This means making sure each meal has a good protein source, a good fat source, and a good amount of fruits and veggies.

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What's In My Kitchen Part 1: The Fridge

by Dr John M Berardi, CSCS

Long ago, when I first began to pay serious attention to my training and nutrition, I learned of a general principle that has served me well and has since become the cornerstone of my body composition success.

If a food is in your possession or located in your residence, you will eventually eat it. Simply put, if you wish to be healthy and lean, you must remove all foods not conducive to those goals from said residence and replace them with a variety of better, healthier choices.

If you know someone whose house is stocked only with optimal food choices and yet who is not healthy and lean, look under his bed.

The bottom line is that you must stock your house with all the ammo you need to fight the battle of the bulge. My body fat ranges from about 5% to about 8% throughout the year (without the use of thermogenics/fat burners) and the only way I'm able to maintain that level of leanness is by removing all temptation from my home, where I spend most of my time.

For years I've advised my clients and athletes to do the same. Now I bring the message to you. Your willpower and discipline will be tested enough at social events, at lunch meetings, and as you pass the six Krispy Kreme locations on the commute home from work. If you're to have any chance of success, you need a safe home base. With that in mind, I'm going to give you a peak into my armory . . . er, kitchen.

In this week's installment, I'll open my stainless steel fridge to show you what and what not to stock. In doing so I hope to demonstrate that there are plenty of options available to the trainee interested in optimal health and body composition. Of course, this is not intended to be a comprehensive list in any way; rather, it's a snapshot of the actual contents of my favorite appliance, and as such should serve as a practical example of the nutrition theory I expound elsewhere on my site.

Meat, Poultry and Fish
Extra Lean Ground Sirloin
Quantity: 3 x 1lb packages
Boneless Chicken Breasts
Quantity: 2 x 1lb packages
Mild Turkey Sausage
Quantity: 2 x 500g packages
Ostrich
Quantity: 2 lbs
Bison (Buffalo)
Quantity: 2 lbs
Elk
Quantity: 2 lbs
Salmon
Quantity: 2 large filets
Eggs
Omega-3 Eggs
Quantity: 2 dozen
Egg Whites
Quantity: 12 x 250mL cartons
Cheese
Aged White Cheddar
Quantity: 4-8 oz.
Baby Swiss
Quantity: 4-8 oz.
Havarti
Quantity: 4-8 oz.
Parmiggiano-Reggiano (Parmesan)
Quantity: 4-8 oz.
Feta Cheese
Quantity: 4-8 oz.

Fruit
Apples
Quantity: 12
Tangerines
Quantity: 6
Red Grapes
Quantity: Large bunch
Pineapple
Quantity: 2 cut and cored fresh pineapples
Strawberries
Quantity: 2 cartons
Blueberries
Quantity: 2 cartons

Vegetables
Spinach
Quantity: 4 bags, 6oz. each

Red, Yellow, and Green Peppers
Quantity: 8
Cucumbers
Quantity: 2
Tomatoes
Quantity: 2
Baby Carrots
Quantity: 2 large bags, 2lbs each

Sauces and Condiments
Pesto
Quantity: 3 jars, one of each flavor
Peanut Satay Sauce
Quantity: 1 bottle
Curry Sauce
Quantity: 1 bottle
Tomato Pasta Sauce
Quantity: 2 large jars
Organic Apple Cider Vinegar
Quantity: 1 bottle
Raspberry Vinegar
Quantity: 1 bottle
Red Wine Vinegar
Quantity: 1 bottle
Balsamic Vinegar
Quantity: 1 bottle
Flax Oil
Quantity: 1 bottle
Garlic-Chili Flax Oil
Quantity: 1 bottle

Beverages
Water
Quantity: 1 large Brita filtered jug

So, what isn't in my fridge?

- Soft drinks, fruit juices and milk
- High fat and sugar salad dressings and other condiments
- Processed breads
- Highly processed, pre-packaged foods
- Rotting leftovers from Thanksgiving dinner

Of course, there are other things that don't make it into my fridge. But rather than enumerate what not to eat, it's better to discuss what we should be eating.

In the end, this short article isn't designed to share the whys – just the whats – as in what it takes to build a great body. I can say with confidence that if your fridge doesn't contain

many or most of the things I have in mine, or if it contains many things that mine doesn't, you'll have a difficult time maintaining a lean and healthy body. If it contains none of what I have in mine, tip your fridge over, dump the contents and begin anew.

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What's In My Kitchen Part 1: The Cupboards

by Dr John M Berardi, CSCS

If you've read my theoretical nutrition articles you've likely familiarized yourself with the macronutrients, when they should be eaten, etc. However, it's easy to talk the nutritional talk -- the question is, do you walk the nutritional walk?

By offering you a glimpse at the contents of my kitchen, I hope to give you the opportunity to check your own practical nutrition habits against my own, and see how nutrition theory is put into practice. So let's go through a tour of my cupboard, covering both pantry items and supplements. By the end of this article, you should see that good nutrition practice involves limits and discipline, but not the austerity that most people assume it does.

Pantry Items:
Rolled Oats
Quantity: 3 lb. bag
Mixed Nuts
Quantity: 2 lb. bag
Mixed Beans
Quantity: 1 lb. bag
Dried Fruit Mix (no added sugar)
Quantity: 1 lb. bag
Legumes
Quantity: 2 x 2 lb. bags (1 bag lentils, 1 bag mixed beans)
Quinoa
Quantity: 1lb. bags
Whole Wheat Pasta
Quantity: 2 x 2 lb. bags
Extra Virgin Olive Oil
Quantity: 1 bottle
Canned Tomatoes
Quantity: 3 cans
Canned Beans
Quantity: 3 cans

Flax Seeds
Quantity: ½ lb bag
Miscellaneous Grains
Including oat bran, wheat bran, oat flour
Green Tea
Quantity: 2 boxes of 20 packets each
Spices
Salt, pepper, fresh garlic, basil, oregano, chili powder, onion powder, and cinnamon are a good start. Seasoning mixes are also handy and take the guesswork out of flavoring. For example, right now I have Italian, Indian, Mexican, and Thai mixes in my cupboard.
*Note: the pantry is where the average kitchen goes horribly awry. Cookies, crackers, potato chips, baking supplies, and other hydrogenated and over-sweetened junk, all perched high above on a shelf, ready to snipe away at your hard-earned health and body composition.

If this is your kitchen, carefully position a large trash receptacle directly beneath said shelf. With a smooth sweeping motion, use your forearm to plow these enemies into the abyss below.

The items above are most likely the only ones you need since most of your nutrition should be coming from fresh, perishable foods – those listed in my previously published article discussing what's in my fridge.

Supplements
Biotest Metabolic Drive (Protein Supplement)
Quantity: 2 x 2lb. containers
Biotest Surge Post-Workout Drink (Workout Drink)
Quantity: 2 x 1lb. containers
Prolab Creatine (Basic Creatine)
Quantity: 1 300g container
Concentrated Enteric-Coated Fish Oil (Fish Oil)
Quantity: 3 x 50 capsule bottles
Genuine Health Greens+ (Green Food Supplement)
Quantity: 1 x 2lb. container
Biotest ZMA (Zinc-Magnesium)
Quantity: 1 90 capsule bottle

*Supplementation should be determined by your training goals and your resources, both time and money. Other than your post-workout drinks, fish oil caps, the occasional scoop of protein or a MRP, and perhaps some necessary micronutrients, no supplement should be taken year-round. And while it should go without saying that supplements should supplement and not replace a solid training and nutrition program, this is one of the most common mistakes I see, even in intermediate trainees. This is an example of my list based on my goals.

In the end, if you wish to expedite the process of reaching your goals, you'll do the following:

Perform an inventory of all the food in your house, excluding nothing. Everything goes on the list, even if you didn't buy it and don't intend to eat it. If it's in the house, either you, someone you love, or someone you marginally tolerate will eventually eat it, so everything is fair game.

Compare your list to mine (both the items on this list and the items in my fridge article). See how close you've come. If you're close (on both the items to have and the items not to have), keep up the great work. If not, round up all the offending grub, and give it a warm send off as it pulls away in the back of a garbage truck.

For those who think it would be more charitable to drop it all off at a food bank, I have news for you: the poor don't want your mother's half-empty box of Ho-Ho's either. If you really want to help, make a donation, drop off some good food, or volunteer your time. Populate your kitchen with the foods above, and you will have built the foundation for nutritional success.

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Why You May Need To Eat More Protein

by Dr John M Berardi, CSCS

Nowadays there are a lot of misconceptions with respect to protein intake. Should one take in 1 gram of protein per lb of body weight? Or is it 1 gram per kilogram? And, to the non-scientist, just how much is that?

Well, before discussing this issue, I think it's important to explore the difference between protein need and protein optimization. When someone asks the question – how much protein should I eat – they are usually trying to figure out how much protein they need to optimize body composition and performance. But the question, "How much protein does an athlete need?" is a very different one from "How much protein should an athlete consume to improve body composition and athletic performance?"

In the research world, the word need is in no way associated with optimization. Instead it's defined as the minimum amount necessary in order to prevent deficiency. Therefore, in asking how much protein an athlete needs, you're asking the question "What's the minimum amount of protein an athlete can get away with to prevent wasting and eventual death?"

Since most athletes have access to and usually consume enough protein to stave off death, the common protein question about how much protein an athlete needs is a bad one. This question doesn't address the issue of real importance, the one that addresses what an athlete should consume to improve performance and body composition?

So, how much protein do individuals need to optimize performance and body composition? Well, the truth is, I don't know. Everyone is different. However, what I do know is this – about 85% of all the individuals I've ever consulted with have been eating less protein that I recommend. And the first thing I do to stimulate results (usually "results" mean body composition changes) is to increase the protein intake while making a few concomitant changes to carbs and fat intake.

Now, there are a number of reasons why I boost protein intake in most clients so I'd like to outline them in this article.

Reason #1
Increased Thermic Effect of Feeding — While all macronutrients require metabolic processing for digestion, absorption, and storage or oxidation, the thermic effect of protein is significantly higher than that of carbohydrates and fat. In fact, protein requires 25-30% of the energy it provides just for digestion, absorption, and assimilation while carbs only require 6-8% and fat requires 2-3%. That means that eating protein is actually thermogenic and can lead to a higher metabolic rate. This means greater fat loss when dieting and less fat gain during hypercaloric diets.

Reason #2
Increased Glucagon — Protein consumption increases plasma concentrations of the hormone glucagon. Glucagon is responsible for antagonizing the effects of insulin in adipose tissue, leading to greater fat mobilization. In addition, glucagon also decreases the amounts and activities of the enzymes responsible for making and storing fat in adipose and liver cells. Again, this leads to greater fat loss during dieting and less fat gain during overfeeding.

Reason #3
Increased IGF-1 — Protein and amino-acid supplementation has been shown to increase the IGF-1 response to both exercise and feeding. Since IGF-1 is an anabolic hormone that's related to muscle growth, another advantage associated with consuming more protein is more muscle growth when overfeeding and/or muscle sparing when dieting.

Reason #4
Reduction in Cardiovascular Risk — Several studies have shown that increasing the percentage of protein in the diet (from 11% to 23%) while decreasing the percentage of carbohydrate (from 63% to 48%) lowers LDL cholesterol and triglyceride concentrations with concomitant increases in HDL cholesterol concentrations.

Reason #5
Improved Weight-Loss Profile — Research from Layman and colleagues has demonstrated that reducing the carbohydrate ratio from 3.5 - 1 to 1.4 - 1 increases body fat loss, spares muscle mass, reduces triglyceride concentrations, improves satiety, and improves blood glucose management.

Reason #6
Increased Protein Turnover — All tissues of the body, including muscle, go through a regular program of turnover. Since the balance between protein breakdown and protein

synthesis governs muscle protein turnover, you need to increase your protein turnover rates in order to best improve your muscle quality. A high protein diet does just this. By increasing both protein synthesis and protein breakdown, a high protein diet helps you get rid of the old muscle more quickly and build up new, more functional muscle to take its place.

Reason #7
Increased Nitrogen Status — Earlier I indicated that a positive nitrogen status means that more protein is entering the body than is leaving the body. High protein diets cause a strong positive protein status and when this increased protein availability is coupled with an exercise program that increases the body's anabolic efficiency, the growth process may be accelerated.

Reason #8
Increased Provision of Auxiliary Nutrients — Although the benefits mentioned above have related specifically to protein and amino acids, it's important to recognize that we don't just eat protein and amino acids — we eat food. Therefore, high protein diets often provide auxiliary nutrients that could enhance performance and/or muscle growth. These nutrients include creatine, branched chain amino acids, conjugated linoleic acids, and/or additional nutrients that are important but remain to be discovered. This illustrates the need to get most of your protein from food, rather than supplements alone.

So, looking over this list of benefits, isn't it clear that for many individuals, an increase in protein intake would be advantageous for most people's training goals? Since a high protein diet can lead to a better health profile, an increased metabolism, improved body composition, and an improved training response, why would anyone ever try to limit their protein intake to the bare minimum necessary to stave off malnutrition?

It seems to me that whether someone's on a hypoenergetic diet or a hyperenergetic diet, the one macronutrient they would want to be sure to overeat would be protein. Instead, by limiting protein intake, most individuals look for what they consider the bare minimum of protein, and then overeat on carbohydrates and fats instead. That's a big performance and body composition mistake.

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Nutritional Supplements

Getting a Balanced Diet

To obtain and maintain a lean, healthy, fat-burning body, your cells need micronutrients (vitamins and minerals). Unfortunately, many of the foods available to

us today are devoid of the essentiality nutrients our bodies use and need. Unless we satisfy our body's need for micronutrients, our bodies will not function properly.

In the midst of your hectic life, you probably don't have time to get the balanced nutrition your body requires. Proper nutritional supplementation can enhance your diet when you don't have time to consume the perfect balanced of macronutrients.

Even if you believe that you are getting all the proper nutrients from food, you would be surprised how absent food really is of the essential nutrients. To learn more about how our environment has changed our health and food sources read the attached special report 'Your Health is in Danger.' Refer to the Approved WARRIOR FITNESS TRAINING list for selected supplementation.

5.) Warrior Fitness Training Glycemic Index of Foods

Food Type	GI
BREADS	
Bagel, white	72
Kaiser rolls	73
Whole Grain Rye Bread	45
BREAKFAST CEREALS	
Rice Bran	49
Kellogg's' All Bran	36
Fruit 'n Oats	39
Special K	54
Cheerios	74
Oatmeal	49
All-Bran Cereal	60
CEREAL GRAINS	
Rice, instant, boiled 6 min	90
Rice, brown	64
COOKIES/CRACKERS	
Oatmeal cookies	55
Vanilla Wafers	77
Stoned Wheat Thins	67
FRUITS AND FRUIT PRODUCTS	
Cherries	22
Grapefruit	25
Apricots, dried	31
Pear, fresh	37
Apple	38
Plum	39
Oranges	40
Grapes	45
Apples	39
Pears	34
Plums	25
Grapefruit	26
Cherries	23
PASTA	
Spaghetti, protein enriched	27
Ravioli, durum, meat filled	39

Spaghetti, boiled 5 min	36
Macaroni	45
Linguine	46
Macaroni and Cheese	64
Whole Wheat Spaghetti	42

CRACKERS

Stoned Wheat Thins	67
Rice Cakes	77

DAIRY

Nonfat Milk	32
Low Fat Yogurt	20

VEGETABLES

Frozen Peas	51
Yams	51
Chickpeas	36
Lentils	29
Baked Beans (canned)	69
Butter Beans	44
Fettuccine	46
Baked Potato	121
Mexican Black Beans	43
Iceberg Lettuce	<40
Green Beans	<40
Salsa	<40
Spinach	<40

LEAN Lifelong Foods

Chocolate Nutrimeal	26
Fibergy Bar	45
Double Chocolate NutriBar	32
Peanut Butter Crunch Nutribar	30
Diet Bar	37

6.) WARRIOR FITNESS TRAINING
Approved Foods

Protein	BV
Whey - Isolate Blends *	**100-159**
Whey - Concentrate *	**104**
Soy *	**59**
Lean Beef	80
Tuna (White)	83
Salmon	83
Nonfat Cottage Cheese (8 oz.)	77
Nonfat Yogurt (8 oz.)	89
Nonfat Milk (8 oz.)	91
Turkey (White)	79
Chicken (White)	79
Egg (White)	88
Egg (Whole)	100
Clams	65

*** Best Sources**

Fat

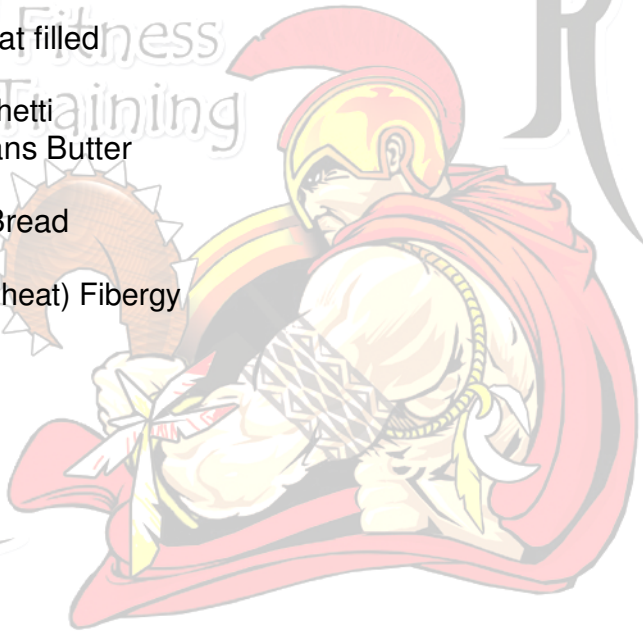
BiOmega-3 *
Opt Omega *
Udo's Choice
Smart Balance
Flax Oil
Olive Oil
Canola Oil
CLA
Peanut Oil
Natural Peanut Butter
Safflower Oil
Evening Primrose Oil
*** Best Sources**

Carbohydrates

Brown Rice
Baked Beans
(canned) Butter
Beans Fettuccine
Mexican Black Beans
True Greens
Green Beans Salsa
Spinach
Low Fat Yogurt Cherries

Cherries
Grapefruit Plums
Grapefruit
Chocolate
Nutrimeal*
Spaghetti, protein enriched
Lentils

Peanut Butter Crunch Nutribar *
Apricots, dried
Nonfat Milk
Double Chocolate NutriBar *
Pears
Kellogg's' All Bran Spaghetti,
boiled 5 min Chickpeas
Pear, fresh Diet Bar - LEAN * Apple
Fruit 'n Oats
Plum
Apples
Ravioli, durum, meat filled
Oranges
Whole Wheat Spaghetti
Mexican Black Beans Butter
Beans
Whole Grain Rye Bread
Grapes
Macaroni (Whole Wheat) Fibergy
Bar - LEAN *
Linguine
Fettuccine
Rice Bran
Oatmeal
Frozen Peas
Yams*
Certified low GI



7.) WARRIOR FITNESS TRAINING
Approved Food and Nutritional Supplements
(Weight and Fat Lose)

Which Fat Loss Supplements Are Best For Me?

With so many different fat loss supplements, it can easily turn into a case of "information overload" trying to figure out which ones are best for you. Our recommended site alone has over 300 different weight loss products ranging from thermogenics to carb blockers (and that doesn't even include all the low carb bars, shakes, and mrps). Help is here! We've made this page to help you find the most effective products for your individual needs. First off, there are several types of weight loss supplements including the following:

- Thermogenic Fat Burners
- Stimulant-Free Fat Burners
- Carb Blockers
- Fat Blockers
- Thyroid Hormone Increasers
- Appetite Suppressants
- Cortisol Products
- Topical Gels
- Other Fat Loss Products

With all these different types to choose from, what should you take to most effectively aid in the fat burning process? Let's start by explaining each one of these types so you have a better understanding of what to expect from each of them.

Thermogenic Fat Burners

If you want a good fat burner without ephedra, this is the place to look! Some people don't tolerate ephedra as well due to a heart condition or other medical condition. Others just don't want ephedra because it makes them feel a little too jittery. Ephedra-free fat burners with caffeine still work very well for fat burning and metabolism increasing.

In the past, fat burners without ephedra didn't work all that well. Luckily, research has intensified in this area and the latest products are really helping people lose fat fast. The basic idea is that if they can raise your metabolism even a little bit, you will burn more calories each day, even while resting.

- Top 5 Products
    - Nutrex Lipo 6 [View Product]
    - MuscleTech Hydroxycut Hardcore [View Product]

- Syntrax Fyre [View Product]
- Biotest Hot-Rox [View Product]
- Universal Animal Cuts [View Product]

Stimulant-Free Thermogenics

Some people want to avoid stimulants altogether, including caffeine. You're in luck, there are a number of awesome fat burners that are stimulant-free! You many not lose as much as you would with ECA stacks, but they are safer alternatives for some people. Results vary, but typically people lose an average of 7-10 pounds with these.

The products below are the ones that people are getting the best results with!

- Top 5 Products
  - MAN Vaporize [View Product]
  - Universal Super Cuts 3 [View Product]
  - BioQuest Tetrazene [View Product]
  - MuscleTech Hydroxycut - Caffeine Free [View Product]
  - Avant Labs SesaThin [View Product]

Carb Blockers

These are a great thing to use alone to increase weight loss or in conjunction with thermogenics or other fat burners. Carb blockers like BSN Cheaters Relief are a great addition to any diet and exercise program.

See why so many of our customers are reporting great results!

- Top 3 Products
  - BSN Cheaters Relief [View Product]
  - Goliath Labs Thermoloid [View Product]
  - Ultimate Nutrition Carb Bloc [View Product]

Fat Blockers

The most famous fat blocker ingredient is chitosan. Working much like the same way as carb blockers do, chitosan binds to fat in the digestive tract. Chitosan is a dieter's dream. It can trap as much as seven times its weight in fat!

Try these products along with diet and exercise and get great results!

- Top 3 Products
    - BSN Cheaters Relief [View Product]
    - Goliath Labs Thermoloid [View Product]
    - Eclipse 2000 Deluxe Chitosan [View Product]

Thyroid Regulators

Thyroid supplements are actually thyroid replacements for what your body would normally produce. This is great because you can regulate and optimize your thyroid so it performs at a higher level than it can on its own. And when you do this (along with proper exercise and diet), suddenly body fat will make like the office slacker when it's time to work weekends - it'll be nowhere to be found.

Popular thyroid enhancing ingredients are guggulsterones and forskolin.

- Top 3 Products
    - Universal Animal Cuts [View Product]
    - Syntrax Guggulbolic [View Product]
    - MAN Scorch [View Product]

Appetite Suppressants

Obviously, the number one reason why you eat when you shouldn't is because you feel hungry. If you can make it so you feel full and have no appetite, you won't even miss the food! Simply eating less would help anybody lose weight, but of course, that is the hardest thing to ask a person to do when they are used to eating whatever they want. Appetite suppressants can be a great part of your successful weight loss program.

Note: Many other fat burning products also suppress appetite.

- Top 3 Products
    - Syntrax Fyre [View Product]
    - MAN Scorch [View Product]
    - ALRI Venom Hyperdrive 3.0 [View Product]

Cortisol Products

Whenever we are under stress, our bodies release its primary stress hormone - known as cortisol. In the body, cortisol is a potent signal to do two things - increase appetite and store fat. This means that whenever we're under stress, the increased cortisol in our body tells our brain that we're hungry, while at the same time telling our fat cells to store as much fat as they can (and then hold on to it as tightly as possible).

We have the top selling cortisol products in the world that have been proven to help you lose fat fast while gaining as much muscle as possible from your workouts!

- Top 3 Products
    - Goliath Labs Thermoloid [View Product]
    - Muscle-Link Cort-Bloc [View Product]
    - NOW Relora [View Product]

Topical Creams

The latest innovation brings us topicals that are put on your skin. You rub it on where YOU want. That's it. It quickly goes to work right there.

Give these products a try and be prepared to be surprised!

Check out the exciting products that are now available.

- Top 3 Products
    - Vyo-Tech Ab-Solution Plus [View Product]
    - Avant Labs LipoDerm-Ultra [View Product]
    - Body FX AB-FX [View Product]

Other Fat Loss Products

Many other products help with your adventure in fat loss. Here are some of the best, with links to full info:

- Pyruvate - Burns fat and stimulates energy.
- 7-Keto - Lose fat, build muscle, slow aging.
- CLA - Gain muscle instead of fat.
- L-Carnitine - Turns fat into energy.
- Protein Bars - Helps with your diet and metabolism.
- Fat Loss Combos! - We put together the best combos!

WARRIOR FITNESS TRAINING
Approved Food and Nutritional Supplements
(Muscle Building)

Muscle Building Supplements Made Easy!
"Ahhhhhhh! I need to build muscle quick, but there's 50 million freakin' different products out there and I don't know where to start!" If this sounds vaguely familiar to something you've heard yourself mutter, you're not alone! We get e-mails and phone calls from customers all the time asking for our advice in choosing the right products to help them gain muscle quickly and effectively.

First of all, you don't necessarily need supplements to gain muscle. However, they will definately help you build muscle a lot quicker. Supplements are simply tools to increase your muscle building potential. Most people start out with a multi-vitamin, protein, and creatine.

First off, there are several types of supplements that make muscle grow, recover, and rebuild faster. Here's a list of the top supplement types people use to produce the best results:

- Protein
- Creatine
- Glutamine
- Multi-Vitamin
- Natural Test Booster
- HMB
- Growth Hormone
- NO (Nitric Oxide)
- Anti-Estrogens
- Protein Bars
- Amino Acids
- Methoxy, Ecdy
- ZMA

With all these different types to choose from, what should you take to most effectively aid in the muscle building process? Let's start by explaining each one of these types so you have a better understanding of what to expect from each of them.

Protein Products

Protein is made of amino acids. Amino acids are the basic building blocks of muscle. Therefore, protein is an essential ingredient for muscle building. You can't build muscle without it! You will want to take in about 1-2 grams of protein per pound of bodyweight throughout the day. So an average person who weighs 150 lbs would want to consume between 150 and 300 grams of protein in a day. Protein shakes and bars are convenient

and provide high quality protein.

There are several forms of protein including: Whey, Soy, Egg, and Casein. So which kind is best? Well that depends on how and when you want to use them. View our in-depth articles on this subject

Whey - Basically, whey protein is awesome for post-workout supplementation because that's the time when your body needs protein the most, and whey is digested very quickly (about 30 minutes).

Casein - Casein, on the other hand, is digested very slowly (over 2 - 7 hours). This means it's great to use a protein supplement with casein before bed because the longest time your body goes without protein is during the night while you are sleeping.

Egg - Egg protein (albumen) digests at a medium pace (1.5-3 hours) so it's a good anytime protein to provide a good sustained release of aminos to the body.

Soy - Soy protein is the vegetarian's friend because it's one of the only complete protein sources derived from plants. Soy is a good overall protein, although it's not as effective in terms of absorbtion as whey or egg albumen. Additionally, soy has many recognized health benefits for women.

Blends - Either protein supplements are straight whey, soy, egg, or casein; or they are a combination of any or all of these kinds of proteins. What can a blend of proteins offer that a straight protein cannot? Basically, different rates of digestion. This means you can take a blended protein any time to get quick, medium, and prolonged absorption of protein.

Low Carb - Of the many protein supplements, the two other main categories are weight gainers and low carb protein shakes and bars. These two are on opposite spectrums of each other. Yep, you guessed it low carb protein shakes are good for those dieting or trying to lose or maintain weight.

Weight Gainer - Weight gainers are high calorie protein products that are great for people who are looking to bulk up. If you are having trouble gaining weight, taking in extra high quality calories will usually do the trick.

- Top 5 Products
    - Optimum 100% Whey Protein [Choose Flavor]
    - CytoSport Muscle Milk [Choose Flavor]
    - BSN Syntha-6 [Choose Flavor]
    - Optimum 100% Casein Protein [Choose Flavor]
    - CytoSport Cyto Gainer [Choose Flavor]

Creatine

Creatine works very well for increasing muscle mass. It is naturally occurring in the body. It's safe and very effective for anybody, especially if you've never used it before. There are a ton of great articles on creatine, so you can become an overnight expert on it! The basics behind it are this: it increases ATP (the main energy source muscles use for explosive power) availability so that you can perform more reps and sets and lift more weight, consequently growing more muscle tissue. Creatine should be cycled. Many have found great results taking it for four weeks, followed by one to two weeks off. There are quite a few different types of creatine. For example, there is pure creatine monohydrate, liquid creatine, micronized creatine and many more.

Okay, so now your head's spinning with different creatine products and types. What's best? The creatine supplements with built in dextrose, aminos and other goodies are probably the best, but cost-effectively a good micronized creatine taken with grape juice wouldn't be a bad choice. Take creatine post-workout.

- Top 5 Products
    - BSN NO-Xplode [Choose Flavor]
    - Higher Power Micronized Creatine [View Product]
    - MuscleTech Nitro-Tech Hardcore [Choose Flavor]
    - MuscleTech Cell-Tech Hardcore [Choose Flavor]
    - Gaspari Nutrition SuperPump250 [Choose Flavor]

Glutamine

L-Glutamine is the most abundant amino acid found in muscle tissue. It helps prevent muscle wasting and improves recovery. The better and quicker you recovery, the sooner and harder you can hit it in the gym! Glutamine is safe to take year-round. Some of our favorites are listed below.

Glutamine should not be taken at the same time as creatine because they compete for receptors to be absorbed. Take glutamine pre-workout and creatine post-workout.

- Top 5 Products
    - Higher Power L-Glutamine [View Product]
    - Prolab Glutamine Powder [View Product]
    - EAS L-Glutamine [View Product]
    - AST GL3 L-Glutamine [View Product]
    - Higher Power Micronized Glutamine 500 [View Product]

Multi-Vitamins

You can't forget about this! It seems so basic and simple, but it's very important! If you

are deficient in even one vitamin or mineral, your gains can really be hampered. A good multi-vitamin is a must for the best gains in muscle mass, not to mention good health.

People who are working out need more vitamins than the average couch potato, so your supermarket brands won't cut it.

Some of the best ones for bodybuilders and athletes are below.

- Top 3 Products
    - Universal Animal Pak [View Product]
    - AST Multi Pro 32X [View Product]
    - Optimum Opti-Men [View Product]

Natural Testosterone Boosters

Raising your testosterone helps you to gain muscle, enhance your mood, maintain a healthy libido, and more! Steroids do a great job of raising test levels, but they are not legal for use. These all-natural products would be perfect for you!

You can also use these natural products when you are off of your prohormone cycle.

This category includes popular products with ZMA, Tribulus, and much more.

- Top 3 Products
    - Universal Animal Stak 2 [View Product]
    - Optimum ZMA [View Product]
    - MHP T-Bomb II [View Product]

Anabolic Flavones (Methoxy, Ecdy)

Methoxyisoflavone and Ecdysterone are the latest advancements in supplementation for anabolic gains. They are non hormonal flavones that naturally increase protein synthesis, nitrogen retention, and muscle growth. They work very well taken in conjunction with protein because they increase the absorption of protein. Some companies even combine the Methoxy into the protein for you.

The most popular supplements with these ingredients are below.

- Top 3 Products
    - Universal Animal M-Stak [View Product]
    - Gaspari Nutrition Halodrol Liquigels [View Product]
    - Vyo-Tech 17-HD [View Product]

Amino Acids And BCAAs

Amino acids are the building blocks of protein. Bodybuilders can especially benefit from supplementing amino acids because they aid in repair, growth, and development of muscle tissue. Among the most beneficial and effective supplements in any sports nutrition program are branched chain amino acids. These are the essential aminos leucine, isoleucine, and valine. If you are looking for better results, make sure you are taking your amino acids! You'll be surprised at how well they work.

The most popular amino supplements are below.

- Top 3 Products
    - Controlled Labs Purple Wraath [Choose Flavor]
    - SciVation Xtend [Choose Flavor]
    - Optimum BCAA 1000 Caps [View Product]

NO (Nitric Oxide)

Nitric Oxide is a free form gas that is produced in the body and is used by the body to communicate with other cells in the body. The fact that nitric oxide increases blood flow should make it of interest to bodybuilders, as increased blood flow will serve to deliver more nutrients to muscles, thus helping muscles become larger when subject to stress. People are noticing huge increases in muscle pumps while using this product!

The most popular NO (Nitric Oxide) supplements are below.

- Top 3 Products
    - BSN NO-Xplode [Choose Flavor]
    - BSN Nitrix [View Product]
    - Universal Animal Stak 2 [View Product]

ZMA

ZMA is a scientifically designed anabolic mineral formula. It contains Zinc Monomethionine Aspartate plus Magnesium Aspartate and vitamin B-6, and is an all-natural product that has been clinically proven to significantly increase anabolic hormone levels and muscle strength in trained athletes. It is all natural! Studies have shown that supplementing with 30mg of Zinc and 450mg of Magnesium per day can elevate testosterone levels up to 30%! In a recent study, the strength of a group using ZMA increased by 11.6% compared to only a 4.6% increase in the placebo group.

This is a great choice for people wanting to avoid prohormones. The most popular ZMA supplements are below.

- Top 3 Products

- Optimum ZMA [View Product]
- NOW ZMA [View Product]
- PrimaForce ZMA [View Product]

HGH - Growth Hormone

Growth Hormone, a polypeptide hormone secreted by the anterior pituitary gland, is the latest advance in bodybuilding supplementation! Human Growth Hormone levels decline rapidly after age 30.

The most popular HGH supplements are below.

- Top 3 Products
  - ASN Humagro [View Product]
  - Fountain Of Youth HGH Complete [View Product]
  - Always Young Renewal HGH Workout For Men [View Product]

HMB

It is a new and exciting supplement that is one of the most popular body building supplements today. HMB is a metabolite of leucine, one of the body's essential amino acids. Many of the world's champions and athletes are using HMB and receiving dramatic results. Specifically, HMB plays a role in the synthesis of muscle tissue. It has the ability to burn fat and build muscle consistently in response to exercise. A seven week long study showed a much greater gain in muscle when a group of 28 participated in a regular weight-training program.

The most popular HMB supplements are below.

- Top 3 Products
  - SciFit Extra Strength HMB [View Product]
  - EAS HMB [View Product]
  - Optimum Mega-Potency HMB [View Product]

Other Muscle Building Products

Many other products help with your adventure in gaining muscle. Here are some of the

best, with links to full info:

Protein Bars - Get the protein and calories you need.
Anti-Estrogens - Decreasing estrogen can give you better results.
Dessicated Liver - Great source of amino acids.
DHEA - For men over 35.
Ribose - Have more energy for your workouts.
Hardcore Products - The most extreme products.
Muscle Building Combos! - Together the best stacks!

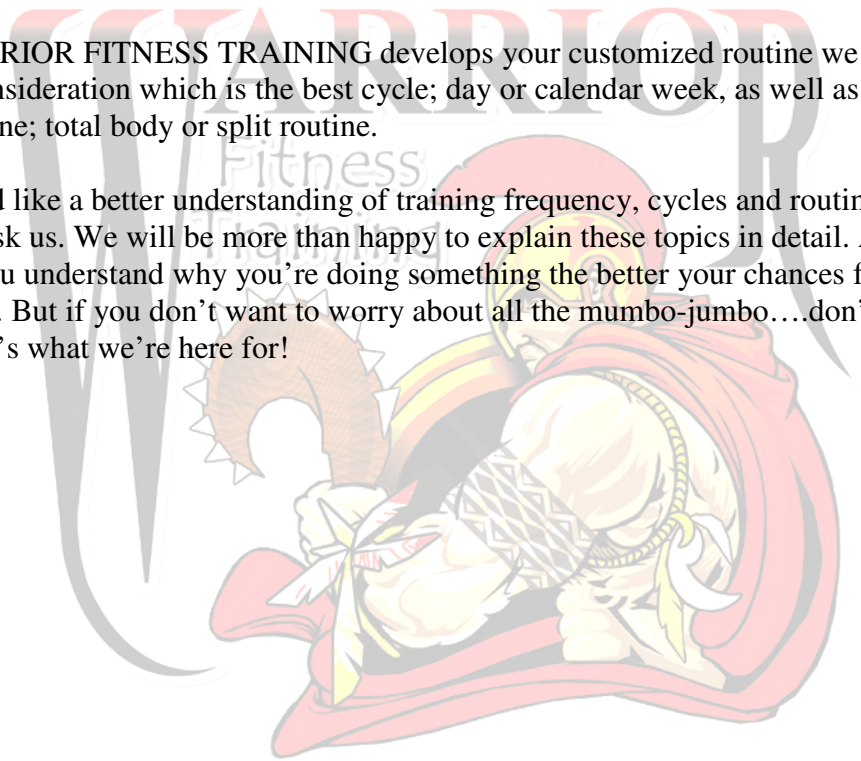
Frequency of Training

To get a better understanding of "how often should I train" a comprehension of the fatigue/recovery curve should be investigated. The scope of this discussion would be encompass more then this entire book, so for the sake of efficiency let's just say that the "harder" you train, the less often you should train.

When WARRIOR FITNESS TRAINING develops your personalized routine we take into consideration you goals, and how "hard" to train to get there. One point, or mistake, needs to be addressed about training frequency and that is the common mistake of overlooking the role of the central nervous system. Again, WARRIOR FITNESS TRAINING has taken the guesswork out of this for you. You can be assured that we will develop a routine with the appropriate frequency to address every aspect of your muscular and central nervous systems.

When WARRIOR FITNESS TRAINING develops your customized routine we will take into consideration which is the best cycle; day or calendar week, as well as the type of routine; total body or split routine.

If you would like a better understanding of training frequency, cycles and routines, don't hesitate to ask us. We will be more than happy to explain these topics in detail. After all, the better you understand why you're doing something the better your chances for progress are. But if you don't want to worry about all the mumbo-jumbo….don't worry…that's what we're here for!



Sample Fat-Loss Workout

(I would like to thank Charles Poliquin for his inspiration in developing this routine)

Comments: This sample program consists of three workouts a week, performed with one- day rest between workouts, for a total of three weeks.

Most exercises are performed in a “superset” or circuit fashion. Thus, when you see exercises marked A1 and A2, you perform one set of A1, one set of A2, then after the prescribed rest return to A1 again. You will also find 3-4 exercises grouped this way, such as B1, B2, B3; and C1, C2, C3, C4. In the first example, perform one set of B1, one of B2, one of B3, and then repeat the cycle.

Tempo is the lowering, pause and raising the weight, i.e. 303 would mean, take 3 seconds to lower the weight, 0 pauses, and 3 seconds to raise the weight. For a 411 count, you would lower the weight in 4 seconds hold/pause for 1 second and raise the weight in 1 second.

Order	Exercise	Weight	Week	Reps	Sets	Tempo	Rest
DAY 1							
A1	Split Squat		1	10-12	4	303	60sec.
			2	10-12	4	303	60sec.
			3	10-12	4	303	60sec.
A2	1 Arm Cable Row		1	10-12	4	411	60sec.
			2	10-12	4	411	60sec.
			3	10-12	4	411	60sec.
B1	Seated Leg Curl		1	10-12	4	501	60sec.
			2	10-12	4	501	60sec.
			3	10-12	4	501	60sec.
B2	Dumbbell Bench Press		1	10-12	3	321	60sec.
			2	10-12	3	321	60sec.
			3	10-12	3	321	60sec.
C1	Stand. Calf Raises		1	10-12	3	211	60sec.
			2	10-12	3	211	60sec.
			3	10-12	3	211	60sec.
C2	Reverse EZ bar curl		1	10-12	3	311	45sec.
			2	10-12	3	311	45sec.
			3	10-12	3	311	45sec.
C3	Leg Raises		1	10-12	3	301	45sec.
			2	10-12	3	301	45sec.
			3	10-12	3	310	45sec.

DAY 2	Exercise	Weight	Week	Reps	Sets	Tempo	Rest
A1	Chin-Ups		1	8-10	4	501	60 sec.
			2	8-10	4	501	60 sec.
			3	8-10	4	501	60 sec.
A2	Back Squat		1	12-15	4	301	60 sec.

		212-15	4	301	60sec.	
		312-15	4	301	60sec.	
B1	Incline Press with Dumbbells	18-12	3	411	60sec.	
		28-12	3	411	60sec.	
		38-12	3	411	60sec.	
B2	Dead lift Semi-Stiff Leg	18-10	3	303	60sec.	
		28-10	3	303	60sec.	
		38-10	3	303	60sec.	

C1	Low Row to Neck	110-12	3	221	60sec.	
		210-12	3	211	60sec.	
		310-12	3	211	60sec.	
C2	Leg Curl Kneeling	110-12	3	311	45sec.	
		210-12	3	311	45sec.	
		310-12	3	311	45sec.	
D1	High Pulley Crunch	115-20	3	201	45sec.	
		215-20	3	201	45sec.	
		315-20	3	201	45sec.	
D2	Calf Raises Seated	115-20	3	111	45sec.	
		215-20	3	111	45sec.	
		315-20	3	111	45sec.	

DAY 3	Exercise	Weight	Week	Reps	Sets	Tempo	Rest
A1	Dead lift		1	8-10	4	311	60sec.
			2	8-10	4	311	60sec.
			3	8-10	4	311	60sec.
A2	L. Lateral Raises		1	12-15	4	211	60sec.
			2	12-15	4	211	60sec.
			3	12-15	4	211	60sec.
A3	Duck Leg Press		1	12-15	4	202	45sec.
			2	12-15	4	202	45sec.
			3	12-15	4	202	45sec.
A4	Triceps Extensions		1	10-12	4	221	45sec.
			2	10-12	4	221	45sec.
			3	10-12	4	221	45sec.
B1	Leg Curl Prone		1	8-10	3	402	60sec.
			2	8-10	3	402	60sec.
			3	8-10	3	402	60sec.
B2	Biceps Curl Dumbbell		1	10-12	3	411	60sec.
			2	10-12	3	411	60sec.
			3	10-12	3	411	60sec.
C1	Leg Lowering		1	8-10	3	212	45sec.
			2	8-10	3	212	45sec.
			3	8-10	3	212	45sec.
C2	Calf Raises Standing		1	10-12	3	211	45sec.
			2	10-12	3	211	45sec.
			3	10-12	3	211	45sec.

NOTES: