

# The Principles of Exercise

Resistance training is one of my areas of expertise. Not only have I done the research necessary to help you avoid being misled by the myths that pervade this area of fitness, I also live it. I know the current and leading-edge science about resistance training, as well as, all the official long words that prevail in this discipline. But, I'm going to avoid getting too academic or technical since that will *not* help you get into the shape you want. Most of what you need to know is simple. So, let's jump in!

## ***What Have I Been Doing Wrong?***

***Did you know that over 53% of women and 44% of men fail to make it past three weeks of a structured exercise and diet program? Why such a high failure rate? I'll tell you.***

Most of us fail, even when loaded with conviction, because the information presently available concerning proper exercise and diet is flat out wrong! It's nothing but a "crapshoot" for most of us, when trying to decipher all of the conflicting information. Further, food manufacturers constantly take advantage of the current confusion about health and fitness. They exploit loopholes in the food labeling laws to market their most profitable products with false or misleading claims. With inaccurate and falsified information, how can anyone expect satisfactory results? With the *Reclaim 24* lifestyle program, you develop an enthusiasm to continue improving your physique beyond what you ever anticipated, simply because the program gives you the right information plus a system for *using* the information - and it works!

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So, what have you been doing wrong? Here are some possibilities.

- You've been looking for your inspiration in all the wrong places. The people or organizations you have trusted to give you good information may not have the right information.
- You *know* you've been following poor fitness habits, but you don't know the best ways to turn that around.
- You've been mesmerized by the sale of junk fitness equipment on TV.
- Your fitness programs haven't fit your lifestyle.
- You've been spending too much time with your fitness training while not getting the benefits you think you should from all the effort.
- You haven't chosen a program intended to keep you fit for life!

- You carry a lot of hope about how you'd like life to turn out for you, but you don't contribute very much otherwise. Hope is not a course of action!

### **Here's the thing:**

You need a compelling *Purpose* to act, one to propel you in the right direction and motivate you to undertake a plan designed to get you what you want.

You need a sound *Action Plan* so you have something concrete to work with and strive for, right from day one - a plan that will bring some quick, significant results to show you that you're indeed on the right track.

You need a *Passion* for wellness that will not only fire your imagination so you can see what a future with maximum wellness looks like, but will also inspire you to warmly embrace the continued discipline needed to carry through with your *Action plan*.

### **Straight Talk about Aging Myths and Lifetime Strategies**

Here's a simple question that I often receive in one form or another: "I'm 42 years old and have never been involved in any kind of structured exercise like weight training. Is it more difficult to develop this habit at my age?"

I've had hundreds of "uninvolved" patients, much older than 42, start and continue my program. They are getting simply wonderful results. Allow me to get right to the heart of wellness so you can see the larger picture and the role fitness plays.

Most people who have gone beyond their mid 30s and into their early 40s have taken stock and heard themselves saying,

"Where is my quality of life going?  
I don't want to grow old, sick, and fat!"

Well, you can do something about it, if you dare yourself to BE WELL, NOW, before too much damage is done!

### **Here's the secret:**

It is not calendar years, but built-up damage from stress, errant thinking, and lack of crucial movement that are stealing your quality of life!

It actually starts when you are in your teens and twenties, but you don't notice it. Yet, the stress and repercussions keeps building. Then, one day you "wake up"

and begin to see and feel the results. Can grunts, groans, and whimpers be far behind?

No, you can't change your calendar age, but you can resist, or even reverse, years of stress damage if you're not too late. And, the sooner you start, the better the results. It's all about learning science-based secrets for ageless living and shattering the perpetual myths that cloud your vision. But, you really do need to recognize the early hints of runaway stress.

### **Early Hints of Runaway Stress**

We get plenty of forewarning about runaway stress - from many directions. Here are some common signs of runaway stress. Even if you haven't experienced some of them yourself, I'm sure they won't surprise you:

- You cringe in front of a mirror because of growing bulges, fading muscle tone, or unmistakable signs of "premature aging."
- Aches, pains, or a foggy brain have become your closest friends.
- You feel tension. You're irritable. You aren't able to concentrate.
- You experience dry mouth, teeth grinding, sweaty palms or cold hands, a pounding heart, shallow breathing, chronic headache, low self-esteem, or withdrawal.
- Your sleep quality is in the pits and exhaustion rules your day.
- You get an upset stomach or urinate frequently.
- You have a lowered sexual drive.
- Your workouts are, well, not working out!
- Tight muscles may cause pain and trembling or you might have nervous twitches.
- You know your hormone balances are all out of whack, but you have no idea what to do about it other than suffer.
- Your doctor has you worried about the "numbers" from your last physical exam.
- Your single greatest weapon for warding off surgery or chronic disease is hope.
- You are handling your quality-of-life problems with stimulants, products from a drugstore, and/or the services of "sickness care" professionals.
- As a spouse, parent, lover, friend, business owner, employee, student, fitness seeker, or creative worker, your **lackluster performance** is leaving others out in the cold - and you're not feeling very warm about it either!

Got stress?

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It's gut-wrenching for me to see a new patient walk into my wellness clinic who is too far gone for me to help them reverse their pain and ravaged health. Sadly, too much damage has been done for too long. Oh, yes, I can almost always make them more comfortable without pill dispensers drugging them out of their senses, but I just can't get used to serving these troubled ones and their faded hopes. Take Action TODAY!

### ***The Importance of Weight Training for Optimal Health***

Unfortunately, many ignore resistance or weight training when devising their exercise plan, thinking they don't want to - bulk up. But, gaining more muscle through resistance exercises is an integral part of any well-rounded fitness program, especially if you want to lose weight - and doubly so, as the calendar years add up.

You should know, however, that weight training for wellness is not about vanity. The intensity of your resistance training can achieve a number of beneficial changes in the molecular, enzymatic, hormonal, and chemical systems in your body.

### ***Train Smarter, Not Harder!***

When it comes to resistance training (including weight training), more isn't better. Time and again, I witness individuals spending hours in the gym, five to six days a week, performing marathon numbers of sets (set is a repetitive movement, without rest, using the same equipment - set of repetitions) in the futile attempt to gain muscle and body tone. I say futile because, month after month and year after year, these people rarely change. Yet, they continue to believe that if a little is good, then more must be better. If they would only reflect on the time and effort they've spent over the years, they would conclude that their training methods must be flawed. But, few people seek competent advice for using resistance training to grow muscle mass or develop better body tone. Nor do they personally research the methods they use, or even try random changes to see if they can stumble across a better workout.

If you've been seeking advice on exercise routines, I commend you. However, if you're getting your advice from popular muscle magazines - both the male and female versions - you've probably already discovered that most of them follow the - more is better concept. You have read that so-and-so pro bodybuilder or fitness queen performs four different exercises at five sets apiece per body part (for example, the chest). You think, - Well gosh, if it works for him or her, it will surely work for me! Sorry.

With the possible exception of athletes using performance-enhancing drugs, the more-is-better approach leads to overtraining - the number one reason body

shapers and bodybuilders fail to progress. Performance-enhancing drugs often get results for very heavy trainers because they allow athletes to recuperate more quickly and efficiently following a stressful workout. These athletes, therefore, don't suffer from the tear-down effects of overtraining (but they may suffer from the side effects of performance drugs).

Every once in a while, an athlete blessed with superior genes comes along and is able to get spectacular results from heavy workouts year after year without using drugs. But, it hardly ever happens. And, you're not likely to be one with such superior genes or you'd know it. The general rule is that long-term physique builders *who follow persistently heavy workout schedules* must resort to stress-adapting drugs, if they want superior results. Not a pretty picture. But, knowing what research has shown about the deleterious effects of overtraining, I must even question the results achieved by genetically gifted athletes. I wonder what kind of results they would have gotten if they had allowed for more recuperation and had trained smarter? Would they have been able to achieve even better results if they had spent less time in the gym and more time resting? I think so.

Actually, I'm confident that they would have at least achieved the same physique while cutting the time spent in the gym in half. This extra time could certainly be better spent adopting more of the personal lifestyle behaviors identified in the four crucial categories of wellness. What good is a dynamite exterior without an interesting, mature, capable, loving interior to go along with it?

### ***Differences in Muscle Development Between the Sexes***

You need to understand the proven principles of muscle development whether your goal is to achieve a well-muscled physique or simply to lose a few pounds to get that toned appearance so many desire. The physiologic concepts remain the same. It's muscle growth (both size and density) that ultimately shapes our bodies, speeds our metabolism, and enables us to readily maintain our desired contours and dimensions.

Now, if you're a woman you might easily be thinking, I don't want to put on muscle and get bulky like some of those fitness girls. Please understand, that simply won't happen. Women who build muscle easily are the rare exception and not the rule.

First, your hormone make-up won't allow it. Although you do produce the muscle-building hormone, testosterone, your level is minute - only a fraction of that produced by men. Plus, your muscles are naturally smaller than men's muscles to start with. Without high levels of testosterone, your development is

quite limited, at least in terms of bulking up. Those bulky women body builders shown in some fitness magazines have usually had help from supplements or steroids. Moreover, they have been training - in bodybuilding rather than fitness - for years, if not decades.

You are, however, more than capable of stimulating muscle growth and thus building a shapely, well-toned body much as so many female celebrities are doing these days. Now, what woman would truly be concerned about developing a little bit too much firmness in her backside?

So, for the last time, let's discard that bulking excuse and realize that resistance training is mandatory, if a wonderfully contoured body is part of your fitness goal. And one more thing: Remember that, as you add muscle, you become stronger and firmer, you increase bone density (which may help prevent osteoporosis later in life), and your metabolism increases, enhancing your ability to burn off unwanted fat.

If you're a man, you must also understand that bulking up isn't so easy, either. If you've been weight training for several years, you know what I'm talking about. Although you have moderate to high levels of naturally produced testosterone circulating throughout your body, you may lack some of the genetics required to build a world-class physique. In fact, most men don't have this potential and, for this reason, should pay strict attention to this next point:

***If you want to maximize your individual potential, you must avoid overtraining - at all costs.***

As I mentioned earlier, overtraining is the number one reason so many people fail to progress.

***The Need for High-Intensity, Short-Duration Workouts***

The resistance training aspect of the *Reclaim 24* Action Plan is based on the principle of stimulating muscle groups with high levels of intensity to make those groups adapt to the higher stress. This means you must consistently attempt to induce a higher level of stress than the previous workout. This forces muscles to change their structure, to grow. If the level of intensity remains the same, muscles eventually adapt and no longer respond with growth. The good thing about performing an exercise at a high-intensity level is that it takes fewer sets to stimulate muscles for maximum growth. That means workouts are short and sweet.

The principle here is simple. Your muscles respond and grow under high-intensity stress much better than low-intensity stress. But, if you overdo high intensity by

working out too long or performing too many sets, new muscle development stops and injuries take over.

In fact:

***It's even possible for your muscles to shrink because too much stress creates a hormonal condition that converts muscle into fuel to protect the body from the additional stress. And, there goes all your efforts to build muscle!***

On the other hand, if workout intensity is too low, your muscles may never get the full stimulus they need and won't fully develop, even with plenty of time in the gym. You can easily see how this principle works with professional athletes. Compare the sport of sprinting with that of long-distance running, for example. Sprinters have lean, well-muscled physiques (both men and women). Their workouts consist of high-intensity, short-duration routines. In contrast, when you look at long distance or marathon runners - those who typically run over 100 miles per week at slow speeds (relative to sprinters) - you see they have somewhat soft, stringy muscles with little definition. They look absolutely nothing like the athletes who run 100-yard dashes. In truth, marathon runners are *severely overtrained*, which has been verified by objective tests. Further, their blood levels of antioxidants rank just below smokers, which isn't at all a good sign!

### ***The Facts about Overtraining***

If you wish to develop the body you dream of, you must avoid overtraining at all costs. To make this crystal clear, I'll stress that overtraining is the act of working a muscle or group of muscles beyond what is needed to induce a maximum stimulus for growth. That means you should focus only on performing a *quality* set or sets of exercises rather than increasing the number of sets.

Earlier, I talked about the deleterious effects of overtraining or over-exercise. For the doubters and non-believers, I'll now go into detail as to why overtraining is a problem. It's all about stress and the hormone cortisol.

Cortisol is an important hormone in the body. It is secreted by the adrenal glands and involved in the following functions and more:

- Proper glucose metabolism
- Regulation of blood pressure
- Insulin release for blood sugar maintenance
- Immune function
- Inflammatory response

A high level of physical or mental stress causes fat, protein, and carbohydrates, along with epinephrine and a number of other endocrine hormones, to be rapidly mobilized in order for you to take quick action against the stressor (the well-known - fight or flight response to stress). During this mobilization, cortisol and adrenaline increase while DHEA (Dehydro-epiandrosterone) and testosterone decrease. Normally, cortisol is present in the body at higher levels in the morning and at its lowest level at night. The fight-or-flight response to stress isn't the only reason cortisol is secreted into the bloodstream. It is also responsible for several other stress-related changes in the body.

*Small* increases of cortisol have some positive effects in the body:

- A quick burst of energy for survival purposes
- Heightened memory function
- A burst of increased immunity
- Lower sensitivity to pain
- The maintenance of homeostasis in the body

Homeostasis: The body's natural tendency to maintain, or attempt to maintain, an internal stability or balance. The organ systems of the body do this by coordinating biological responses that automatically compensate for environmental changes.

While cortisol is an important and helpful part of the body's response to stress, it's also important for the body to activate its *relaxation response* following a stressful event. This allows the body's functions to return to normal.

Unfortunately, in our current high-stress culture, the body's stress response ramps up so often that it doesn't have a chance to return to normal. This results in a state of chronic stress with higher and more prolonged levels of cortisol being present in the bloodstream. Moreover, you should know that high-intensity exercise and prolonged exercise, both, increase cortisol levels. This means that overtraining creates chronic stress in the body along with high, prolonged levels of cortisol!

Cortisol levels remain elevated for about 2 hours following an exercise session, since exercise is a stressor. Therefore, prolonged exercise sessions, or repeated sessions without appropriate rest between the sessions, results in chronic, elevated cortisol. Additionally, poor diet, inadequate supplementation, and lack of rest, in general, also play key roles in cortisol secretion.

A *chronically* elevated cortisol level causes your body to enter a state of constant muscle breakdown and suppressed immune function, increasing your



risk of illness and injury while cannibalizing muscle tissue. That's right. **Chronically high cortisol levels shrink muscle tissue.** Cortisol has a catabolic (muscle breakdown) effect on tissue and is associated with a decrease in anabolic (muscle growth) hormones like IGF-1 and GH. Because of this, we've learned that minimizing cortisol levels is ideal for an athlete if he or she wishes to achieve tissue growth and positive adaptations to exercise training.

Another negative outcome of too much cortisol is increased abdominal fat. Aside from appearance frustrations, increased abdominal fat is associated with a greater number of health problems than fat deposited in other areas of the body. This happens because abdominal fat can secrete dangerous hormones. Some of the health problems associated with excess stomach fat are heart attacks, strokes, and a poor cholesterol profile that can lead to other health problems.

Still other negative effects of too much cortisol are:

- Reduction in athletic performance because of fatigue and inflammation
- Reduction in ligament health
- Poorer sleep quality
- Mood swings
- Reduced sex drive
- Decreased bone density
- Slowed wound healing
- Impaired cognitive performance
- Suppressed thyroid function
- Imbalanced in blood sugar such as hyperglycemia
- Higher blood pressure
- Lowered immunity and other inflammatory responses in the body

Cortisol secretion varies among individuals. People are biologically wired to react differently to stress. One person may secrete higher levels of cortisol than another in the same situation. Studies have also shown that people who secrete higher levels of cortisol in response to stress also tend to eat more than people who secrete less cortisol. They also eat food higher in carbohydrates. If you're more sensitive to stress, it's especially important for you to learn stress-management techniques, as well, as adopting a low-stress lifestyle to the degree possible.

### **How Do I Know if My Cortisol Levels Are High?**

Mood swings, lack of motivation to train, loss of muscle, and loss of appetite are all symptoms of an elevated cortisol level. Sound familiar? That's right: It's the

overtraining syndrome! If you are not taking steps to modulate your cortisol, you are breaking down your muscle, storing fat, and getting sick, none of which make sense for someone interested in wellness!

A more scientific approach is to have your testosterone/cortisol or IGF-1/cortisol levels tested. A suppressed ratio of either IGF or testosterone over cortisol is a sure sign of decreased exercise capacity and overtraining. There is also strong evidence that an athlete who exercises in a carbohydrate-depleted state experiences greater increases in cortisol. Decreased frequency of menstrual periods in women (amenorrhea) has been linked to insufficient energy availability. That, in turn, triggers a stress-hormone response and suppresses estrogen and progesterone.

### ***How Does Cortisol Affect My Endurance?***

It is only with chronically elevated cortisol levels that your performance suffers, but the effect is dramatic. Because excess cortisol suppresses your immune system, you have a greater risk of upper respiratory infections. Of course, as mentioned, your body enters a catabolic state, breaking down muscle and storing fat.

In addition to reducing your muscle and getting sick, suppressed testosterone means suppressed recovery. Aerobic and anaerobic muscle fibers need time to repair and recover from hard workouts to improve their capacity to exercise. Elevated cortisol and suppressed testosterone do not allow you to maximize your recovery, leading to slower performance gains. Additionally, amenorrhea in women and low testosterone in men may increase risk for stress fractures.

### ***How Can I Modulate Cortisol?***

You can modulate your cortisol production through rest, nutrition, and supplementation. First, since repeated bouts of exercise cause chronic, elevated cortisol, it is crucial to get plenty of rest between workouts. You get your best results, by far, with a day or two of rest between workouts.

Bottom line: Once you've completed the number of sets to be outlined in the *Reclaim 24* Workout of the next chapter, **you need to discontinue exercising that particular muscle group for the remainder of the session.** *If you press ahead with additional sets, it means either you did not fatigue yourself with the required number of sets, or you're simply choosing to ignore this rule - at your peril.* Then cortisol becomes your enemy instead of your friend.

### ***The Physiology of Muscle Development***

To further help you avoid the temptation to perform extra sets, I'll explain the physiology of muscle development.

For a muscle to change, it must first be subject to a stimulus such as weight-resistance exercise. This stress or stimulus results in micro-trauma to the individual fibers (myofibrils) that make up that muscle. When the body repairs these micro-tears - a typical process for muscles - it leads to a stronger and more developed muscle. If the repair process is hindered in any way, the full potential for growth is minimized and the results are disappointing.

When does the repair process take place? Well, it sure doesn't take place while you are forcing additional sets upon a muscle group that you've already stressed to the hilt!

### ***Muscle growth and repair occur only when you are resting. No rest equals no growth!***

This following point is strange, but true. When a muscle has been fully stressed, but not overstressed, *rest is the closest thing you can get to using anabolic steroids for muscle growth*. The effects are quite similar. So, if you want those muscles to respond to the hard work you put in at the gym or at home, you simply *must* allow plenty of time for rest, which even includes taking an occasional nap.

Naps are anabolic (tissue building) in nature and work wonders for mental recuperation as well. Rest also means staying away from the gym between workouts. You use these rest days to take care of other life matters or to simply enjoy some leisure time.

Please remember the reason you're doing this program. You're unhappy with past results and are hoping this program will be your answer. It *will* be your answer if you trust me and allow me to serve as your mentor. Follow the program! Although there are countless things in life that I don't know much about, this topic isn't one of them. This is an area of expertise for me. Please take advantage of that.

### ***The Importance of Resistance Training as You Age***

I'm sure it's no surprise to you that, as we age, our muscles want to shrink, which decreases strength and increases the likelihood of falls and fractures. Yet, if we are at all able to move, we can do much to prevent muscle atrophy by incorporating the *Reclaim 24 Workout*.

Researchers have found that muscle atrophy, resulting from long periods of inactivity or immobility, is hard for older people to overcome. If they kick off an exercise program with too much intensity, they may generate scar tissue, inflammation, and unusual soreness instead of muscle - effects that younger people don't experience. So, it's important to start slowly and gently, working at

a pace that fits your age and current level of fitness. I believe it's never too late to begin an exercise regimen, but you must be sensible in your approach, especially if you are older. Get professional help from a properly educated personal trainer or physical therapist. That's the wise and safe way to go, especially if you are new to exercise or you have not exercised in a while.

New research is beginning to show why aging muscles don't respond to exercise as well as younger muscles. It was already known that older people don't use ingested protein as well as younger people to make muscle. Now, they've also found that insulin released during meals does not work as well with older people as with younger. With younger folks, released insulin suppresses the metabolic breakdown of muscle (for fuel) during fasting periods (overnight and between meals). But, for older people, insulin *does not* suppress muscle breakdown quite as well. The researchers also found that the blood flow to older muscles is less than that to the muscles of younger people. That got them asking: Does muscle wasting in older people occur because decreased blood flow reduces the supply of hormones (insulin) and protein to those muscles?

Exercise, they reasoned, is a natural remedy for poor blood circulation. So, in the study, they followed up with the older group by having them take three weight-training sessions per week over 20 weeks. From this, the research team confirmed that the exercise regimen rejuvenated blood flow in the extremities of the older group *to the point where it was identical to that of the younger group!* Does this experimental result confirm that exercise may protect muscles from wasting away in older people? We will have to wait for further confirmation, but the research findings, so far, seem to be saying, - use it or lose it.

Yes, as we age, physical exercise becomes ever more important for retaining optimal health - even longevity. Nature has programmed the human body to enter decline after the procreation years of the teens, 20s, and early 30s. This natural decline with age (stress buildup) can be seen in all organ and hormonal systems of the body. But, as humans, we can forestall these natural tendencies for many decades by changing the way we do things - *by changing our habits to reduce stress and to support our stress-fighting biological functions.* The problem is that most people want to follow the path of least resistance (an apt phrase in this chapter) and hope that nature will continue to support them as it did in their procreation years. But, it will not - at least, not without help.

A 67-year-old patient relates that when he was 43 - he remembers it well - he would come home after a full days work and sit on his couch exhausted. It felt so darn good not to move! It was the *natural* thing to do. Yet, his couch time seemed to replenish his energy stores, less and less, over time. He knew he was losing something.

Then, one evening, as he sat there, he had an epiphany of sorts. He realized that he was carving a future pathway towards, even further, inactivity and physical decline. The handwriting on the wall was suddenly clear! At that moment, he decided he wasn't going to take the natural, lazy route any longer. He was going to start *moving* just as he had in his teens, 20s, and 30s. It didn't make any difference that his peers weren't moving; he would. So, he went out for a labored jog, but was nonetheless energized from the effort. An oxygen infusion! A week later, he bought a cheap weight bench and weights to take care of the resistance training side of his epiphany. That was the turning point - the beginning of the rest of his self-care life. He wasn't going to follow the path of least resistance because he could clearly see where it was leading - the Pits of Despair - and he didn't want to go there!

Since then, he has embraced many wellness opportunities to challenge the natural decline that accompanies the path of least resistance. He says he's glad he has done so. It's been a worthwhile investment of time, effort, and money for him. But, there had to be an investment. Nature doesn't hand out gifts. So, let's take this idea a step further. Many common diseases spring from a sedentary lifestyle such as diabetes, heart disease, and osteoporosis. In addition, limited ranges of motion, aches and pains, and excessive muscle wasting also arise. Under these conditions, resistance training is probably your answer for maintaining optimal health well into your senior years.

### ***How Resistance Training Can Reduce Your Disease Risks (e.g., Diabetes, Heart Disease, and Dangerous Organ Fat)***

Your body has two types of fat: visceral and subcutaneous. Subcutaneous fat is located just below your skin and is the type that causes dimpling and cellulite. Visceral fat, on the other hand, shows up in your abdomen and surrounds your vital organs including your liver, heart, and muscles. It is visceral fat that has been linked to serious health problems such as heart disease, diabetes, stroke, insulin resistance, and many other chronic diseases or problems.

We've learned that a key strategy for reducing your risk of heart disease and a host of other chronic diseases is to keep your systemic inflammation levels low. Another key strategy is to avoid gaining visceral fat in the first place - or to reduce what's already there. Exercise - especially resistance training because of its effect on muscle development - offers a double-barreled solution. It both lowers hidden inflammation in your body and is one of the best weapons against visceral fat. For example, in one study, 8 volunteers who did not exercise had an 8.6 percent increase in visceral fat after eight months, while those who exercised the most, lost over 8 percent of their visceral fat during the same period.

As I emphasized before, muscle tissue burns many calories, not only when it is in use, but also when at rest. Yes, muscle tissue is metabolically active around the clock, even when you're sleeping. It's your 24/7 solution to burning calories! So, as you gain muscle, your body naturally increases the amount of calories burned each day. This reduces fat stores, if your hormone system is working properly.

As for lowering inflammation, physical exercise accomplishes this naturally by lowering levels of a C-reactive protein (CRP), a blood protein linked to hidden inflammation. High levels of CRP in your body are associated with a higher than average risk of cardiovascular disease. These days, CRP levels are better indicators of heart attack risk than high cholesterol. In fact, you'll be hearing less and less about cholesterol, with time, because the cholesterol myth is being busted. But, Big Pharma will keep the home fires burning as long as possible in order to sell cholesterol-lowering drugs. So ...

### ***Beware of Drugs that Can Cause Irreversible Damage to Your Muscles***

Aside from a sedentary lifestyle, another common cause of excessive muscle wasting is the use of statins, a class of cholesterol-lowering drugs with many dangerous side effects. Statins such as Lipitor, Zocor, Pavaacol, and Mevacor lower your cholesterol by inhibiting HMG-CoA reductase, a key enzyme in cholesterol synthesis. But, they can also activate the atrogen-1 gene. That gene plays a key role in muscle atrophy. A recent study showed that even low concentrations of statins lead to atrogen-1-induced muscle damage. And, the higher the dosage, the greater the damage. Since your heart is a muscle, this side effect can lead to quite unpleasant side effects!

The moral? Practice wellness so you don't have to get into trouble in the first place.

### ***How Strength Training Reduces Osteoporosis***

Weight-bearing exercise is one of the most effective remedies against osteoporosis. Taking drugs is the last thing you want to do to improve your bone density. Without question, bone-density drugs are more likely to cause long-term harm than bring benefits. These drugs do indeed make your bones more dense, as the drug commercials suggest, but *not* stronger - which the drug commercials *do not suggest!* How can that be? Imagine a glass tube. Fill it with sand to increase the density. Will that make the tube stronger and prevent it from breaking?

Your bones are actually porous and soft. As you get older, they can easily become less dense and consequently more brittle, especially if you are inactive.

Resistance training can counter this effect, if your nutrition and hormone balances are right. As you put more tension on your muscles, it puts more pressure on your bones, which then respond by continuously creating fresh, new bone (which the drugs don't do). Also, as you build more muscle and strengthen the muscles that you already have, muscle tone itself puts more pressure on your bones, *constantly*. This constant stress induces bone strengthening.

### ***Do Keep Yourself in Motion!***

I can say one thing with confidence: I've had considerable experience with older patients, associates, and friends who train with resistance and who have adopted a wellness lifestyle. That experience tells me that it has worked wonders for them. I'm confident future research will continue to confirm what I already know about the wellness lifestyle for older people. But it's important for you to understand that the earlier you adopt a *Reclaim 24* lifestyle, the more value you will get from it. The declines that come from inactivity, or from other poor health habits, build up over time and are seldom fully reversible.

Optimal health is dependent on an active lifestyle, in addition to other wellness-practice behaviors. So, start moving and don't stop, no matter what your age! If you do stop, you'll find that nature has reserved a seat for you - or a bed, as the case may be - on that infamous Conveyor Belt to a Living Hell.

And, do follow the *Reclaim 24* resistance-training regimen unless your physical condition precludes it. The *Reclaim 24* Workout is the number one way for you to remain strong, young, and independent - well into advanced age.

Now, let's jump into the fitness part of your 12-week action plan: the *Reclaim 24* Workout.

# Reclaim 24

You'll need only 24 hours of actual fitness training to achieve a welcome and easily recognized body metamorphosis. I've structured my program so you make these changes over a 12-week period, meaning you perform no more than two - 2 - hours of total exercise each week. I'll repeat that again: TWO HOURS PER WEEK.

The workout is divided into three different sessions per week, always with one or two days of rest between sessions (including one or two days of rest between the last session of one week and the first session of the next). These three weekly sessions are your *push day*, your *pull day*, and your *legs day*. You devote each session to muscle groups or body parts as described next.

## Your Three Weekly Sessions

- On your PUSH DAY, you exercise: *Chest, Shoulders, Triceps*
- On your PULL DAY, you exercise: *Back, Biceps, Abdominals*
- On your LEGS DAY, you exercise: *Quadriceps, Hamstrings, Calves*

On each of the three days, you perform two exercises per body part, such as your chest. And, you perform each exercise over two sets. For example, on your push day, the following *preliminary* table applies - which doesn't include warm-up sets yet:

<b>PUSH DAY</b>	<b>EXERCISE</b>	<b>SETS TO FAILURE</b>
Chest	Upright Chest Press	2
	Flat Bench Flyes	2
Shoulders	Seated Dumbbell Press	2
	Standing Dumbbell Laterals	2
Triceps	Close-Grip Pushdown	2
	Lying Triceps Press	2

The table shows that you perform two different exercises for your chest, two for your shoulders, and two for your triceps. Further, each of the six exercises must be done twice – two sets per exercise (I'll explain “sets to failure” in a little bit). Don't worry if you don't know what the exercise names mean. That information is available in Appendix A, with photos and plenty of explanation on how to perform the exercises.

If you do your arithmetic right, you'll see that for each workout day, you'll perform exactly 12 sets, with four sets dedicated to each body part or muscle group for that day. In a little bit, you'll see that you also need to include warm-up sets.



To avoid boredom, and to keep your muscles from adapting and becoming too efficient for effective growth, you want to avoid performing the same exercise more than once for the given body part during that days workout (which would amount to all four sets using the same equipment and same motion). Rather, you want to choose two *different* exercises from a menu of exercises for that body part. This gives your muscles some variety.

As the table shows, to train your chest muscles on your push day, you might choose to do two sets of the upright chest press on a machine designed for upright presses and two sets on a flat bench with an exercise called a flat bench fly. In Appendix A, I've illustrated sample exercises that you can use for this program, along with explanations of how to perform them.

So, once you've performed your four sets for each body part or muscle group, you're done for the day! Then, except perhaps for some social time with others in the gym, you head for home.

### **What “Sets to Failure” Means**

Now, I'll explain what I mean by sets to failure. This is the key for transforming your body in 24 hours worth of exercise. Each of the 12 sets must be done until the muscle(s) you're training become exhausted! In body-shaping lingo, we call this training the muscle to failure. So, you're not just counting some fixed number of repetitions and then stopping. You're pushing your muscles hard enough to reach the point where you simply CANNOT do one more complete repetition or movement! *That's* when the set is over (and not after you've counted 10 repetitions, for example). I recommend you perform *two* sets to muscle failure for each different exercise.

This means, if you initially planned a ballpark number of 10 repetitions in a set, you don't stop at 10 just because you've reached it. Instead, you must push and push, adding further repetitions until your muscles fail you (whether it's more or less than the ballpark 10). Remember, your muscles will not grow well with low-intensity exercises. You need to place the most stress on them that you can. I'll talk more about this in the upcoming section, *Exercise Quality Is Crucial*.

### **Warm-ups Are Essential**

If you've done any weight training before, you might now be asking about the need to warm up before attempting your failure sets. And you'd be right to ask! Yes, indeed, you do need to include warm-up sets prior to the intense sets shown in the above table. So, the first table must be augmented just a bit. What follows is what the final push-day table looks like after we add warm-ups (and totals) to the picture.

## Push Day

PUSH DAY	EXERCISE	WARMUP SETS	SETS TO FAILURE
Chest	Upright Chest Press	2	2
	Flat bench Flyes	1	2
Shoulders	Seated Dumbbell Press	1	2
	Standing Dumbbell Laterals	0	2
Triceps	Close-Grip Pushdowns	1	2
	Lying Triceps Press	0	2
Totals		5	12

You always need a couple of warm-up sets to start your exercise routine for the session because your muscles are cold and unprepared. Cold muscles simply won't work as well as those that you've warmed up, and you won't be able to get the greatest benefit from your routine. Furthermore, a cold muscle is *much* more prone to injury, and injury is not a designated part of my wellness program! Warm-ups get the blood flowing in the muscles for better nutrient support and waste removal. They also kick off the process of neuromuscular recruitment, which means that your brain and nervous system are starting to gear up for the tasks to come. (I'll explain *neuromuscular recruitment* in more detail at the end of this chapter.)

This final table considers several points. For one thing, both warm-up and high-intensity sets have carry-over value for later sets so that you have to execute fewer warm-up sets. This is so, because some muscle groups are warmed up to a certain degree with each exercise and the need to perform the same level of warm-up for succeeding exercises goes away. Nevertheless, to avoid injury and to properly activate neuromuscular recruitment, a single warm-up set is *always* warranted when beginning a new muscle group.

### **How to Perform Warm-up Sets**

You don't perform warm-up sets to failure, or even to any great level of intensity. Nor, should they exceed about eight repetitions for the set (an eight count is okay for warm-ups).

When performing warm-up sets, you want to use a weight that is about 70%-80% of the weight you plan to use in the intense sets. You need not perform more than 6-8 repetitions for a warm-up set to be effective.

Can you see now that your total time in the gym is not going to be that great? With this program, you do not spend more than 30 minutes total time performing resistance exercises. If you perform these sets correctly, you have no need for additional sets. In fact, doing additional sets can be counterproductive because they may result in overtraining.

If you are new to resistance training, or you don't have the slightest idea what kinds of resistances to start with, make sure you consult a professional to get you started.

Some people simply cannot handle much resistance at all because their current organ and glandular condition worsens with the additional stress of high-intensity physical activity. They may easily tire during warm-ups or even find themselves feeling worse for a day or more after a workout (but simple muscle soreness doesn't count as worse because it's actually better). Such people *must* work with both a professional at the gym and a wellness doctor who can keep them from going places they shouldn't. Remember this: under your wellness practice, 5% or more of it is devoted to handling conditions or situations that may not respond well to self-care. So, professional help is in order. \* \* \*

Your Pull Day and Legs Day are designed the same way as your Push Day. Here are example workout tables for these two days (you may choose different exercises for each body part as shown in Appendix A).

### **Pull Day**

<b>PULL DAY</b>	<b>EXERCISE</b>	<b>WARMUPS SETS</b>	<b>SETS TO FAILURE</b>
Back	Wide Grip Pull-Downs	2	2
	One-Arm Dumbbell Rows	1	2
Biceps	Standing Dumbbell Curls	1	2
	Preacher Curls	0	2
Abdominals	Twist Crunches	1	2
	Pelvic Roll-Ups	0	2
Totals		5	12

### **Legs Day**

<b>LEGS DAY</b>	<b>EXERCISE</b>	<b>WARMUP SETS</b>	<b>SETS TO FAILURE</b>
Quadriceps	Leg Press	2	2
	Leg Extensions	1	2
Hamstrings	Lying Leg Curls	1	2
	Dumbbell Lunges	0	2
Calves	Seated Calf Raises	1	2
	One-Legged Calf Raise	0	2
Totals		5	12

### **Exercise Quality Is Crucial**

How you perform your individual sets is just as important as the intensity. In fact, it's the key to being able to place the maximum amount of stress on muscles without having to use a substantial amount of weight or risk injury.

Muscles are made up of bundles of fibers that contract. Individual fibers within these bundles react in all or nothing patterns. In other words, any given fiber - called a myofibril - is either fully fired by the nervous system for shortening or it isn't fired at all. This means that the variability in contraction of the *overall* muscle is based on the *number* of fibers that contract. Therefore, good muscle-building exercises engage as many muscle fibers as possible and for a sufficient amount of time to stimulate them fully. Muscles grow best with such intense stimulation.

### **Overcoming the Instinct to "Make Things Easy"**

One of the greatest handicaps an undisciplined body builder or body shaper faces is the strong impulse to perform any given exercise *in the easiest way possible*. This means he or she instinctively takes advantage of inertia and the ready availability of adjoining muscles (plus posture deviations) to complete a given repetition. This is called cheating in gym parlance and the impulse must be replaced with something better.

For example, when doing a standing biceps curl, if the beginning of the movement is used to start the weight into a swing motion, then the lifter is able to reduce the amount of effort required during the last part of the upward movement because the weight has been launched, so to speak. The problem with cheating is that fewer muscle fibers are stimulated to contract than if a slower, more controlled approach is used to lift the weight. In other words, for muscle building, well-controlled movements do not use inertia to aid completion. Remember, the name of the game is to stimulate as many fibers as possible, *but only in the muscle group being trained*. Inertial movements and other forms of cheating work against this. That's why my program avoids such movements.

The common problem with inertial movements is they usually require the assistance of other muscle groups in order to gather the momentum needed for cheating. These are muscles that you *don't* want to train with the given exercise. For example, it's common to see a lifter arch his or her back during the explosive part of a biceps curl. This certainly makes the curl easier. But, it defeats the principle of maximum muscle-fiber stimulation. The result is that the bicep group you *want* to train isn't getting its fully intended benefit because other muscle groups, in both the back and the shoulders, have inadvertently been recruited during the movement to make the biceps curl easier. So, fewer bicep muscle fibers get stimulated. See?

The solution to the problem of inertia and cheating is to attempt to complete your repetition in a slow and controlled manner while staunchly retaining your posture. In this way, you stress the largest number of fibers in the desired muscle group. This stimulates the muscle group to its full capacity. To perform your repetitions in a slow, controlled, posture-preserving manner may mean you have to use a lighter weight initially. As you continue to exercise properly, you soon find your strength increasing. Along with this, the need to increase the weight.

How slowly should you perform a repetition? Let me give you my experience. Over the years I've experimented with the explosive rep, as well as, the slow rep and have found that, as long as I am controlling the movement, the speed is probably right. However, as I've aged, it's become less desirable and more uncomfortable to train with excessively heavy weight. So, I've chosen to work out with more moderate weights. By slowing down my repetitions to a three-to-four second cadence in both the contracting direction and relaxing direction, I've still been able to provide an optimal amount of muscle stress while using less weight. And, so the muscle growth and maintenance continues. This slower movement also puts less stress on my joints and tendons.

### ***The Two Phases of Contraction***

Resistance training requires opposite movements for each exercise repetition. The first part of the movement, Phase 1, contracts the muscles being stimulated, which means tightening and shortening. Phase 2, the second part of the movement, reverses the effect of Phase 1. This means Phase 2 relaxes and lengthens the muscles being trained, so you can get back to your original position. For the best results, *both* phases should be done slowly and in a controlled way, not just Phase 1. And, keep in mind, that both phases require some level of muscle contraction. It's just that Phase 2 reduces the intensity of contraction enough so that the machine, or weight resistance, takes you back to your starting point so you can repeat Phase 1.

For example, raising a weight with a biceps curl tightens and shortens the biceps, while lowering the weight back to its original position lengthens the biceps. Pressing a barbell upward, during a bench press, tightens and shortens the triceps and letting the weight return to your chest, in a slow release, relaxes and lengthens the triceps.

Numerous studies have shown that slow, controlled movements in *both* directions are necessary to stimulate a muscle to its full capacity. That's why it's so important to move through an *entire* repetition slowly and deliberately (except for *partial reps*, to be discussed in a minute). You should know, however, that certain pieces of hydraulic equipment now being used in some ladies' gyms only support the contraction or muscle-shortening phase of an exercise, ultimately limiting the overall progress and muscle development of those who use that equipment.

## **How to Achieve “Intensity”**

I explained the importance of high-intensity training earlier, but how do you achieve this? Well, one component of intensity is making certain you continue to push through your set until your muscles can no longer complete a full additional repetition. This is what we call proceeding to muscle failure. This means that, on a scale of 1 to 10, *you should be performing at intensity level 10 for each set that isn't a warm-up set.* It's because of this 10-level intensity that only four total sets are needed to maximize the stress load on the muscle or muscle group you're training. Besides, after pushing this hard for four sets, you won't want to do additional sets!

To enhance high-intensity training even further, we use techniques to stress muscles at the end of a set, *after* you've completed your final full repetition. These techniques add to the intensity level which, in turn, force the muscle to continue to respond and develop. I like to use three different techniques for achieving this: partial reps, drop sets, and forced reps. Forced reps require a spotter or training partner, while a spotter is optional for partial reps and drop sets. Here's how these techniques work.

### **Partial Reps**

Partial repetitions are self-descriptive. When you're convinced you are in the midst of the very last complete rep that you can eke out in your current set, and you're under the full Phase 1 contraction for that final rep, then don't allow the muscle to fully release in Phase 2; *just release part way.* Then, start a full Phase 1 contraction again! It's sort of a mini rep in which you don't use the full range of motion that otherwise might be available to you. Though you probably couldn't have done another full rep, you usually can squeeze a partial rep or two out of your exhausted muscles.

For example, if you're performing your final bench press rep for a set, the full Phase 1 contraction occurs when you press the weight furthest away from your body with your arms fully extended. From this position, you allow the weight to come toward you only part way before pressing it to the full, extended position once again.

I recommend that you perform partials with a partner (spotter) standing by to help you. The exception is for exercises that don't put you at risk, if you should fail during a full or partial rep. For example, performing pull exercises, such as the Lat Pull Down or Biceps Curl, generally doesn't pose any threat and you don't need a spotter to protect you if you fail. If you're using a machine instead of free weights, you can also avoid the need of a partner or spotter since the machine won't collapse on you. I often prefer machines to free weights for that very reason. They allow me to push to the optimum point of failure without worrying about finishing the rep or injuring myself.

When choosing the partial rep technique at the end of a set, you only need to perform two partial repetitions. To avoid overtraining, this technique should be used only with the *second* high-intensity set performed for each exercise. Don't use it with the first set.

### **The “Drop Set”**

This technique works quite well, especially if you prefer free weights or don't have access to machines. The Drop Set implies dropping down to a lighter weight to accomplish an additional two or three repetitions once you've reached muscle failure in the primary set. For example, assume you've just completed your second set of dumbbell shoulder presses to the point of failure. You know you cannot possibly perform another repetition on your own. So, you now place the dumbbells on the floor and quickly grab a *lighter* set that allows you to perform a few extra repetitions. Don't take any more time than necessary for exchanging weights before continuing the set. This technique works well with both machines and weights and doesn't require that you use a spotter.

### **Forced Reps Plus “Spotter”**

When you are near the end of a set and your muscles become just too exhausted to complete even one more full rep with good form, you may eke out a few more forced reps with the help of a spotter. A spotter is a workout partner, or trainer, who helps you complete your sets. When you are doing forced reps, this person physically helps you move the weight through the entire starting and finishing ranges of motion because you can't do it on your own.

As with partial reps, you should restrict forced reps to two or three additional movements. And, as with partial reps, forced reps should only be used on the last set of each high-intensity exercise. Many people find that having a workout partner motivates them and pushes them beyond what they normally would ask of themselves. For this reason alone, I highly recommend finding someone with whom you are likely to be compatible. Please use caution here. If your partner isn't as motivated as you, consistently misses workouts, or is frequently late, look for another. Half-motivated partners only limit your progress.

### **How Many Repetitions Get the Best Results?**

To repeat, more important than the number of repetitions in a set is the *quality and intensity of the movements you perform*. The most crucial set in any given workout is the one you're performing *now*, meaning not the last one you did, or the next one, but *this* one. Always concentrate solely on your current set and finish it with your best effort. With that said, let's talk about reps.

All in all, a rep range between 6 and 12 allows you to adequately stimulate the most fibers and, therefore, best stimulate muscle growth. For beginners, I recommend initially choosing resistances or weights that keep you around the

10–12 repetition range. Later, you can attempt heavier weight that forces you into the 6-8 rep range. But, please don't preoccupy yourself with the number of repetitions completed as long as you can feel you're taxing your muscles to their limits. Personally, I often alter the weight I use to keep a muscle group from adapting to my workouts. Of course, the rep ranges must also change to accommodate the different weights.

One more thing: You'll no doubt hear, if you haven't already, that repetitions in the range of 15 to 20 are better when trying to achieve greater muscle definition. This is ludicrous. You get lean when you add muscle and watch your diet, not when you simply perform many repetitions in a set. If you want to do 15 to 20 reps for the occasional shock value to your muscles to help prevent adaptation, go ahead. Just don't feel that you need to do it often or that it will help you get the definition you seek. It won't.

### **Rest Periods: How Many? How Long?**

How much rest should you allow between sets? As a rule of thumb, you need only 30 seconds of rest following warm-up sets and about 60 seconds between your high-intensity sets. The main point is to make certain you have ample time to recuperate between your high-intensity sets. A little more or less than 60 seconds isn't going to make a difference.

The actual time it takes to complete a set should be about 45-60 seconds, give or take a few seconds. So, adding up the total time of the resistance training session, we get the following:

- 5 total warm-up sets at 40 seconds = 3.5 minutes
- 5 rest periods at 30 seconds = 2.5 minutes
- 12 total intensity sets at 60 seconds = 12 minutes
- 12 rest periods at 60 seconds = 12 minutes

### **Total workout time = 30 minutes**

**Note:** You may use your rest periods to move to different pieces of equipment, change weights, or re-hydrate.

### **The Role Played by “Neuromuscular Recruitment”**

This term is really less technical than it sounds at first blush. It makes sense with a simple explanation.

For a muscle to contract, there must be a signal sent from your brain to activate the fibers that make up the bulk of that muscle. When preparing to lift a pencil, your brain sends signals to just enough fibers to accomplish this task (remember, the fibers that make up a muscle contract independently and are either contracted completely or not contracted at all). Because you've trained your brain to know that the weight of a pencil is quite small, the proper signals are



sent to the muscles of your arm, hand, and fingers to fire the minimal number of fibers to get the expected job done.

Now, let's suppose you're instructed to bend down and lift a barbell weighing 200 lbs. Knowing this, you prepare yourself mentally, get into position, breathe in deeply, and go for it. But, what if someone has fooled you and the real weight of the barbell is only 10 lbs? What will happen? You will most likely jerk that weight with everything you have and fall on your backside in total surprise.

That's neuromuscular recruitment in action! Your nervous system recruits the number of muscle fibers it *expects* will be required for the task at hand. In the above situation, your brain is fooled into thinking it needs to send enough signals to your muscles to achieve a 200 lb. lift when, in fact, the weight is only 10 lbs. Because of this, *all* your muscle fibers contract. But, when it turns out the actual resistance is only 10 lbs, you fall on your butt. On the other hand, if you know beforehand that the weight is only 10 lbs., your nervous system does the right thing and you complete your lift eloquently (we can hope).

When it comes to resistance training, it's important to condition your brain to effectively and efficiently do its job. Your warm-up sets not only warm your muscles for the more intense sets to come, but also remind the brain that more weight is on the way and that the right amount of neuromuscular recruitment must take place to handle the greater stress. The brain, therefore, prepares itself to send out the number of signals needed for you to lift the heaviest weight you can for 6–12 intense reps. Furthermore, two intense sets per exercise rather than one convinces the brain to activate greater numbers of fibers. Therefore, you get better coverage.

### ***How do I Get Started***

If you've been working out, you should be able to jump right into this new program and, although you will experience soreness, your body should be able to adapt appropriately.

For those of you that have not been working out, it is probably a good idea to use a (3) week transition to get muscles and joints ready for high intensity training (otherwise, you may feel like you can't move the next (2) days). Follow these simple steps and you'll be ready to go at 100% in no time.

As an example of a more moderate approach, you may want to start out by performing only one exercise per body part, which cuts your workout down to 25 minutes. If you're resting properly and eating right, you'll still see dramatic results, even with this less-aggressive approach. Whatever approach you choose, however, make it your personal decision, one that you're comfortable with and *one that you know you can stick with*.

I would like to reemphasize that before beginning the high-intensity workout and interval training outlined in this binder, I recommend you visit your doctor if you have any health concerns.

Proper exercise rarely places us at risk, but you should always take caution. To further help prevent problems for yourself, begin slowly. Use mild to moderate intensity until you feel confident in pushing harder. As I've seen with all of the individuals who have incorporated this program, I'm confident that you'll not only get results, but that you'll also find it to be an enjoyable experience - one that's easy to continue as a *lifestyle*.

Mild to Moderate approach might look like the weeks below:

Week 1: (1) set of 12 reps of each muscle group at 75% effort (no failure) followed by cardio work.

Week 2: (2) sets of 12 reps of each muscle group at 75% effort (no failure) followed by cardio work.

Week 3: 100% to failure following the moderate program, as mentioned above, or the full program, if you feel confident in pushing harder.

# Anaerobic Cardio

True aerobic training calls for raising the heart rate into an acceptable range, which is dependent on age, in order to burn fat for energy. Do you accept that?

Moreover, the pervasive myth seriously overestimates the ability of cardio to shed fat and chisel the abs. Therefore, you can relax if you thought I was going to tell you that you must do 30-40 minutes of aerobic training five days a week. That's enough to scare most people to the couch. It's true that maintaining your heart rate at an elevated, but not an overly rapid, rate for a period of 15 minutes or more coaxes your metabolism into shifting gears to burn fat as its main fuel source. Isn't this what everyone wants? Of course it is, but there are different ways to meet this goal - some better than others.

## ***Aerobics, Alone, Won't Give You the Shape You Want!***

If you've ever tried to lose weight and tone up through aerobics, whether on a stationary bike, a treadmill, or by attending aerobics classes, you probably weren't overly impressed with your results. Granted, if you increase your energy expenditure while keeping your calories the same, you eventually lose some weight. But, did the shape of your new body look much different from when you started? Did you really see those muscles taking on a distinct shape and firmness? Heck, did you see any muscles at all?

Don't feel bad. You're not the only one who's spent persistent, boring hours on cardio equipment trying to burn off that large dinner from the night before. And, by the way, something else happens when you begin to do a lot of aerobic training. Your appetite grows. This typically leads to a vicious cycle as you try to do even more aerobics to burn more calories and then eat more to feed your body's increased demand for fuel. This is a cycle not worth starting. My point is this:

## **Aerobic training has little if any effect on changing the shape of your body.**

If you're lucky, you may actually lose some weight over time. But, then you just become a flabby skinny person. Why, then, do all the so-called fitness gurus say you must do aerobic training? Because they are working with the wrong information.

The truth is, I don't at all feel guilty about coaxing people away from spending hours per week on bikes, treadmills, or jogging, if what they really want is a better toned and shaped body! So let's look at the facts.

When you walk on a treadmill, you burn about 125-175 calories every 30 minutes, depending on your size and fitness level. If you do this three times a week, every week, you burn about 1500 additional calories for the month. Whoopee!

Now, here's an interesting point. For every pound of muscle you develop, your body burns over 1,500 calories per month just to maintain it. The fact is, muscles are calorie-burning machines - not only during exercise, but also at rest! Further, when you keep your insulin levels at the lower end of the health range during both aerobic exercise periods and during rest periods (which are also aerobic), your body automatically dives into your fat reserves for energy. So, if you were to put on an additional two pounds of muscle, that extra muscle would automatically burn up more than 3,000 calories per month - *the equivalent of about 6, 30-minute aerobic sessions per week!* Now, can you see why developing muscle is so valuable for weight control? It takes a lot of caloric energy to build *and maintain* lean tissue, whereas fat barely requires any energy at all to maintain. In fact, fat is energy in potential form - pure fuel stored away in globs around your body.

Therefore, if you want to change your body composition, waste no more of your precious time trying to do it with boring aerobic activities. Too much aerobic training can actually hinder your progress since it can lead both to muscle atrophy and a slower metabolism. However, if you feel you really want to take part in an occasional aerobics class, spin class, romp on the treadmill, or on a stair-stepper, go for it. But, do it for the fun of it, as well as, the cardiovascular fitness. Just limit such activities to two or three sessions per week. Although jogging on a treadmill won't offer much in the way of toning and shaping your body, it offers tremendous benefits toward your cardiovascular health.

My 12-week *Reclaim 24* Action Plan advocates replacing regular aerobic activities with moderately paced resistance training plus high-intensity interval training. Each of these replacements helps you develop cardiovascular fitness, as well as, reshape your body. If you choose not to follow my type of fitness program, you need to do the boring stuff to retain cardiovascular health. And, you may be destined to remain a flabby skinny person.

### ***The Advantages of High-Intensity Interval Training***

Although I don't see much value in low-intensity aerobic training for body shaping, I do know it's important to maintain cardiovascular fitness. Any type of exercise that makes the heart and lungs work harder is, by definition, cardiovascular fitness training. This includes moderately paced resistance training. As you move through your *Reclaim 24* Workout, you soon find you have no time to chat with fellow gym members or take calls on your cell phone. Instead, you have to focus and move through the workout at a steady pace, if

you are to complete it in the allotted 30 minutes. This keeps your heart rate elevated throughout the session and improves your cardiovascular fitness as a result. But, for those of you who wish to really get the heart and lungs pumping, I've included 10 minutes of interval training *at the end of your resistance training*.

Cardiovascular interval training is a high-intensity, short-duration, type of exertion meant to work the heart and lungs, as well as, burn off excessive glycogen stores. The burn-off works like this...

The blood sugar, glucose, is stored within the muscles or liver as glycogen, a form of animal starch that the body quickly and easily converts back to glucose. The interesting thing about glucose is that it requires no oxygen to burn. This means it is an anaerobic fuel ideal for supplying energy bursts during high-intensity, short-duration, workouts where oxygen is in short supply. However, here's where things get dicey. The brain runs on glucose and protects itself more than any other organ. After all, it is the body's command and control center. Therefore, when glycogen stores start running low, the brain conserves a quantity for its own use and automatically shifts to other sources of fuel to support the body's energy needs. In fact, the brain signals the body to cannibalize its own lean tissue and stored fat, converting them to glucose and certain types of fatty acids that will burn for fuel. Your lean tissue, by the way, includes muscle, bone, and connective tissue - none of which you want to be using for fuel!

However, fat converts more slowly to fuel than does muscle, bone, and connective tissue. This means that under *anaerobic* conditions, where the largest amounts of energy are needed in a short period, fat is the last source to be used for fuel. So, any time your workout uses up too much glycogen, you are putting your muscles and other lean tissue at risk of being used for fuel. This is the last thing you want your workouts to do for you!

However, once an intense workout has ended and you are back in an *aerobic* state, the body's demand for quick energy lessens. In its biological wisdom, the body happily switches to metabolizing stored fat for fuel rather than consume its lean tissue. Fat's slower conversion rate doesn't serve as a hindrance under these conditions because the rate is sufficient to meet the lower energy needs. And, your fat reserves *will* burn if your hormone system, including your leptin metabolism, is healthy.

So, the secret is to keep your workout short and sweet. You burn up much of your glycogen stores during the 30 minutes of high-intensity resistance training and consume an additional amount during your 10-minute interval training that immediately follows. With your 40-minute high-intensity-plus-interval-training

workout, you deplete a large portion of your body's glycogen stores *without getting into the danger zone*. Then, when your workout has ended, the brain knows it's safe to shift more fully into using the body's fat reserves for fuel. In fact, you want to take advantage of the brain's fat-burning process following your workout. *This means ingesting nothing, but water, until your body gives you a hunger signal*. That hunger signal may arrive in five minutes after you finish (not typical at all), or maybe a couple of hours after you finish. Before the hunger signal arrives, you will have a clear head and a feeling of good energy that follows healthy workouts.

When the hunger signal does arrive, it means your brain no longer wants to burn the fatty acids that have been released into the bloodstream and, instead, wants to replenish your exercised muscles and other tissues for growth and recuperation. But, there's more. Because of how your leptin metabolism works, your muscle building *efficiency* is the highest of all, when you postpone eating until you are actually hungry! Further, you get the most fat-burning benefit when exercising at least three or more hours *after* a meal. Combine these two principles and you can nicely link fat burning and muscle building by timing your exercise routines to closely precede mealtimes. Of course, *for some people* this means less energy being available for challenging workout routines. Such individuals do better eating something an hour or two before exercise. So, each of us needs to feel our way to our best exercise times. Often, life doesn't give us much of a detailed choice and we exercise when we can find the time! But, please take note: once the hunger signal arrives following exercise, you don't want to postpone eating for very long - no more than 30 to 45 minutes. Why? Because if you don't satisfy the hunger signal in less than an hour of its receipt, your brain will shut your metabolism way down and, at the same time, set up lengthy cravings out of fear of starvation. You may actually end up gaining weight in the next day or so. I'm sure you have experienced getting over hungry from missing a meal and seeing how hard it is to satisfy your appetite once that happens.

By using my exercise strategy, you not only exercise your heart and lungs, but you also get a period of fat burning (5 minutes to 2 hours or more) during the rest period before your next meal. Doesn't this sound like a better alternative to your typical aerobic workout?

Now, most people don't know this, but interval training - which means go fast, then go slow, then repeat - offers definite advantages over low-intensity cardio work, even though it is more challenging. For example:

- 1.) It burns more calories than low-intensity training, meaning you can burn more fat in shorter workouts, if you do it right.

2.) Higher intensities stimulate your metabolism far more *after* the workout ends than lower intensities do. This means you continue to burn calories and fat for long periods after you finish training. This is not true with low-intensity training, where the elevated calorie burn rate drops close to normal when you are finished.

3.) As with training at high intensity, training at higher speeds can dramatically improve sports performance for those interested in such achievements. Football players can sprint faster and recover more quickly between plays. Tennis players can keep chasing down balls during longer points. Even endurance athletes benefit by conditioning their bodies to work at a faster pace.

And so, that's why 10 minutes of high-intensity interval training is part of the *Reclaim 24 System*.

To perform the interval training exercise, you need to find a piece of cardio equipment you're comfortable with, be it a treadmill, elliptical trainer, or stair stepper. If you enjoy the outdoors, you can perform this type of training with a bike or even on foot. The idea is to elevate your heart rate by **aggressively pumping your legs** for one-minute intervals while moving at a more moderate pace between the intense intervals. Your intensity level should allow you to push through an entire 60 seconds, but not much longer. If you find you're able to move at your intense pace for more than two minutes, you need to up your intensity level or resistance setting on the machine. As you complete each one-minute interval, you lower your intensity, or setting, to allow yourself to catch your breath.

Let's assume you've chosen the stair stepper to perform your exercise. By trial and error, you soon learn, for example, that a level-12 setting on the machine creates high intensity for you. Your workout would look something like this, assuming the example of level 12 being your high-intensity setting:

STAIR STEPPER (Total Time = 10 Minutes)

- 2 minutes on level 6 to warm-up
- 1 minute on level 12
- 1 minute on level 8
- 1 minute on level 12
- 1 minute on level 8
- 1 minute on level 12
- 1 minute on level 8
- 1 minute on level 12
- 1 minute on level 8 (Follow with 1-2 minute cool down)

If possible, you also will want to use different equipment for your 10-minute interval training at the end of each workout (treadmill, stair-stepper, rower, and so on). That will not only give you some variety, but also work your muscles in slightly different ways, preventing adaptation. There's nothing quite so unproductive as becoming "aerobically efficient" by doing the same exercise, in the same way, all the time. Without change, you will no longer get the same benefits from your efforts. And, you can tell because your interval training will continue to get easier with time.

So, there you have it. The total time for the entire workout is 40 minutes (30 minutes of resistance training and another 10 minutes of high-intensity interval training). This is all the time you need to develop the body of your dreams. If your fitness goals are moderate, you may even do less, but follow the same principles.

I would like to reemphasize that before beginning the high-intensity workout and interval training outlined in this binder, I recommend you visit your doctor if you have any health concerns.

Proper exercise rarely places us at risk, but you should always take caution. To further help prevent problems for yourself, begin slowly. Use moderate intensity until you feel confident in pushing harder. As I've seen with all of the individuals who have incorporated this program, I'm confident that you'll not only get results, but that you'll also find it to be an enjoyable experience - one that's easy to continue as a *lifestyle*.



## **Anaerobic Cardio Work**

Cardio work is performed on each weight day. Cardio is to consist of 10 minutes of high intensity, short duration, interval training. You may use an elliptical machine, exercise bike, treadmill, or other cardio training piece of equipment. You may also walk or jog on the road.

You will work at a lower intensity for 2 minutes, then ramp up the intensity for 60 seconds, down for 60 seconds, up for 60 seconds, and so on for 10 minutes. It doesn't sound like much, but when done properly, you will maximize your workout and feel like you have performed cardio for much longer than 10 minutes.

Have fun and work it!

### **Peak Interval Exercises**

Stationary Bike (tension)

Treadmill (incline)

Elliptical (tension)

Rowing (tension)

Stairs (up/down)

Rope (speed)

Running in Place (with weights)

Alternative: 30 seconds of high intensity and 90 seconds of recovery (slower pace)

Also, check out [www.bodyrock.tv](http://www.bodyrock.tv) (the daily hit) for at home interval training.

## ***Frequently Asked Questions***

**Q:** The Reclaim 24 weight resistance routine requires me to perform only four high-intensity sets per body part. This is quite different from the old school of thought that suggests many more sets. What's the difference?

**A:** Most training literature suggests three exercises per body part times three sets per exercise for a total of nine sets. Many athletes perform even a greater number, thinking more must be better. There is no logical or scientific reason for performing so many sets.

Reason and science began to play a role when thinkers such as Arthur Jones, inventor of Nautilus equipment, and Mike Mentzer, champion professional body builder, came on the scene and questioned the validity of such myths. Those two pioneers saw no concrete evidence that performing multiple sets would result in more lean tissue. On the contrary, what they saw was that such overtraining most often hindered improvement by hurting the body's ability to recuperate. It's during recuperation, or rest, that the body repairs and grows muscle (its called hypertrophy).

With that in mind, it seemed logical to reduce the number of sets to a bare minimum, while performing the sets at a high-intensity level. After all, it's high intensity that stimulates the growth of muscle tissue. When performing too many sets, the exerciser tires before reaching the best level of intensity, minimizing his or her ability to stress a muscle properly for stimulating growth. In other words, the multiple-set theory results in many burned calories, but not in the best muscle development.

Whether you want to add muscle size and bulk or simply develop an attractive and toned physique, it's the stimulation of muscle at a high level that's required.

**Q:** I am a 33 year-old mother of two who is 20 pounds heavier than I was before having children. I am excited about getting back in shape, but I don't wish to look masculine by adding a lot of muscle. Will training with weights make me bulky?

**A:** Absolutely not! Let's put that age-old myth to rest. Amongst those who have trained with weights for many years, it's quite apparent that adding muscle is no easy task, especially if you're a woman. Weight resistance exercise is the only way to increase muscle and muscle tone and, ultimately, change your physique. Developing size comes from increasing your caloric intake. If you're restricting calories in an effort to lose fat or control your weight, there is no way you're going to "bulk-up." It's simply impossible to grow larger muscles without adding

calories. That's the science. By the way, those women with the perfectly toned bodies seen on the covers of many health magazines look that way because they train with weights.

**Q:** I've never really been fond of weight training, but I know I must exercise because I am soft and out of shape. Can I develop a nice body taking aerobic classes?

**A:** Unfortunately not. Please understand that by performing only aerobic exercises, you may improve your cardiovascular health and possibly even keep your overall weight in check. You won't, however, develop shapely, toned muscles to any great extent.

To prove this for yourself, just look at the people in the gym who spend countless hours each week on the treadmill or stationary bike, but who don't train with resistance. Do they ever change? Do they really have the toned, athletic bodies of weight lifters? I don't think so.

Don't be fooled by the TV infomercials showing guys and gals performing exercises on ridiculous exercise equipment that is serving as the fad-of-the-day. That fad equipment did not give them the hard bodies that they display through their skimpy clothing. In truth, they are athletes who train exceptionally hard to develop their physiques. They never, ever use the worthless junk being promoted in the ads.

**Q:** I've always been told that aerobic exercise burns the most fat. If this is true, then why does the Reclaim 24 Workout not include this?

**A:** First of all, aerobic training does indeed have an impact on fat metabolism while we perform the work. However, when the work stops, so does the extra fat burning! In contrast, muscles are like 24-hour fat-burning engines. Extra muscle growth means an increase in your metabolic rate because muscle, unlike fat, needs calories just for maintenance. This means that added muscle burns calories throughout the day and night, even when the work stops. When you have your cortisol under control, much of that calorie burning comes from fat.

Although the Reclaim 24 Workout doesn't seem to incorporate aerobics, it actually does. During the first 30 minutes of the workout, you are performing high-intensity, weight-resistance exercises. To complete the program in 30 minutes, you must move at a rapid pace. This elevates your heart rate, throughout the entire 30 minutes, to a level achieved with aerobic exercise. So, although you are training with weights, you receive the benefits of 30 minutes of aerobic training at the same time. Then, when you add the additional 10 minutes of interval training for further glycogen burn-off, you will have achieved

40 minutes of aerobics. And, this occurs three times each week. That is sufficient to keep you aerobically healthy. Of course, if you do any other aerobic activities for fun, that just adds to the numbers.

**Q:** I've always been told to perform my aerobic exercises to warm up before lifting weights. I noticed that your interval training, which partially replaces low-intensity aerobics, follows the weight lifting. Can you explain this?

**A:** The purpose of interval training is twofold. First, interval training improves cardiovascular fitness and endurance with great efficiency. Second, it's included at the end of the workout, to burn off some of the glycogen stores (a form of sugar stored within muscles and the liver) not used by the workout. By initially using glycogen to fuel your weight resistance exercises, you allow for the maximum energy bursts and strength required to grow muscle. Following this, interval training has a tendency to burn through a large portion of the remaining stores. With glycogen largely depleted (but not overly depleted), the body starts using another source of energy after your workout ... FAT! You continue to burn a larger percentage of fat until you ingest calories 30-45 minutes after your workout is finished. This beats running on the treadmill for 40 minutes straight, don't you think?

**Q:** My work schedule does not allow me the free time to exercise. What are people in my situation supposed to do?

**A:** Finding 40 minutes, three times per week is a choice. So, please be truthful with yourself. If you try hard enough to find excuses, you will. Humans are extraordinarily creative in avoiding things they don't want to do. Getting in shape and caring for your health is either important to you and those you care about or it is not. Only you can decide this. If you're now a person who doesn't have much discipline for following through and maintaining an exercise schedule, then you'll have to find a purpose to change. If you cannot find enough reason or purpose within yourself, then think about your family, your significant other, or other loved ones.

Second, if you'll allow it to happen, you'll soon find that dedicating two hours per week to exercise actually increases your energy levels, thereby increasing your productivity. Increased productivity leads to accomplishing more with less time. Any more excuses?

**Q:** I'm 42 years old and have never been involved in any kind of structured exercise such as weight training. Is it more difficult to develop this habit at my age?

**A:** You're never too old to adopt positive changes in your life. Ending poor habits while simultaneously developing good ones is a matter of bringing some discipline to your mind. It's not about age.

A habit is a habit, whether a good one or a bad one. Developing good habits such as exercise and a life-affirming diet may take time and discipline, but once formed, these habits only get stronger when you see positive changes taking place. You have to decide which habits bring you happiness and which bring you grief, which will bring success and which will simply rob you of precious time and quality of life. Transforming your body into something you can be proud of ultimately leads to transforming your inner-self as well. Once you master the discipline of changing your body, you gain greater mastery in other departments of your life, too.

**Q:** I am a frequent traveler, which places me in hotels two weeks out of every month. What do you suggest for people like me or for those in the airline industry?

**A:** Although hotels often don't have much to offer in terms of a variety of exercise equipment, some do. In either case, you can always make best use of what they have available.

If a hotel facility is missing many of the machines or equipment you're used to, you'll find that what they do have can often be used in a variety of ways to train other muscle groups. You might even have to perform a higher number of repetitions, if they are limited to only light dumbbells, for example. As long as you follow the principles of the Reclaim 24 Workout, it's alright to periodically alter your exercises, as well as, the number of repetitions. Remember, the idea is to attempt to always perform your high-intensity sets to the point of muscle failure. This ensures that your muscles get a sufficient stimulus to respond.

If you don't mind leaving the comforts of your hotel, it's likely you'll find a gym nearby. Almost every city has a variety of nice health clubs that offer up-to-date weight resistance and cardiovascular equipment.

Finally, there are certain lightweight exercise products you can carry in your luggage such as exercise bands.

**Q:** A few guys at my health club have pretty large muscular physiques. They appear to train more frequently and far longer than your program suggests. Why is it that they have seemed to put on quality muscle, if their type of program leads to overtraining?

**A:** Yes, it's true that many athletes, mostly men, perform many more sets per body part than what my program calls for. Those same athletes would probably do well with almost any weight resistance program. You see, a few of us are genetically gifted, but most of us are not. The gifted ones have the ability to respond better, as well as, recuperate more quickly. Some less-gifted folks manage to respond and recuperate better because they use anabolic steroids.

Yet, whether gifted or a user of enhancement drugs, those same athletes would respond even better if they used the Reclaim 24 high-intensity, minimal-sets principles. In other words, they are probably limiting their progress by excessive training, but they fail to realize this because their current program has proven to offer some continued results. They certainly fear losing what they have gained and, therefore, find it hard to change, especially when the change means performing fewer exercises! In a worst-case scenario, such athletes would maintain their current shapes while freeing up much gym time to work on other aspects of their lives. If only they understood the research and results that others have achieved.... But, they are unlikely to heed the science behind muscle development out of fear and habit. Maybe the gym is the only place they can socialize, so it fulfills more than just a bodybuilding or strength-training need.

Remember, one of the main reasons for physical transformation is to learn how to form good habits and carry that knowledge into other - or all - areas of your life. Do you really think it's productive to stay in the gym or exercise longer than necessary? If 40 minutes of training, three times a week is enough, then it's enough! Outside of simply enjoying some form of leisure sport, you need to spend your time on other important life activities such as your career, family, mental health, and spiritual health. These things all take much more time than developing your body - and should.

**Q:** My wife showed her personal trainer your Reclaim 24 body-shaping program just to get her opinion. Her trainer felt that results would come faster with additional sets and additional time spent on cardio equipment. Do these trainers really know what is best?

**A:** I can certainly appreciate your wife's curiosity and need for second opinions. I imagine that in starting a new 12-week program, your wife, like most others, would want to tell friends about her new goal and the program that is going to get her there. Her friends, most of them well intentioned I'm sure, would be giving her second opinions. Each would have her own idea how to get the best results.

Her personal trainer may also have her own ideas. I know of some trainers who are well educated and thoroughly understand the fundamentals of my program

and use it. I'm also aware of many trainers who simply took a quick certification course and magically became experts in the field.

Here's a general bit of advice to help with such issues. Just take a good look at the person giving you the advice and note a couple of things.

1. Does the trainer look to be in good shape? If the people dispensing advice are doing this for their livelihoods, you should expect them to be in good shape, yes?
2. What do their personal clients look like? If the trainers know what they are doing, then a substantial number of their clients will look quite good.

**Q:** My husband and I have three young children at home. We would really be more comfortable exercising within the home than away at a gym. Can we put together the proper equipment without spending a ton of money?

**A:** Like many of my friends, I started weight training with little more than a couple of dumbbells (with interchangeable weights) and a bench. With this, I was able to develop a well-toned and proportioned physique. The dumbbells supplied all my upper body movements, while I used my own body weight, in the form of one-legged squats, to develop my thighs.

So, the answer is yes! You don't need fancy equipment or a gym membership to obtain your fitness goals. What you do need is Desire, Discipline, and Dedication. Put these three "Ds" together with my high-intensity, body-shaping program and you get the best results possible.

The minimal amount of equipment should include a stable bench, a mat, and a couple of weight-interchangeable dumbbells. If you don't mind spending a few more dollars, you may prefer to purchase five or six sets of dumbbells so you can move more quickly from one set to another.

## Exercise Quiz

1. The two exercises performed for strengthening the chest muscles are the bench \_\_\_\_\_ and chest \_\_\_\_\_.
2. Push day involves the \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ muscle groups.
3. The 3 major muscle groups exercised on pull day include the \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
4. The largest muscle groups are exercised on leg day. The muscle groups involved on leg day include the \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
5. By performing our weight training exercises prior to our cardio exercises, we are able to achieve a \_\_\_\_\_ metabolic state faster.
6. When initially beginning the exercise program, \_\_\_\_\_ minutes of intermittent cardio exercise is required.
7. The goal of our weight training program is to push the exercised muscle to a state of \_\_\_\_\_ for the given exercise. This means that maximum change can be achieved.
8. Correct \_\_\_\_\_ and form is essential with weight training exercises.
9. When doing your intermittent burst cardiovascular training, you will work at a lower intensity for \_\_\_\_\_ seconds and then ramp up to a \_\_\_\_\_ intensity for 60 seconds.
10. When performing your weight training exercises, always try for the fullest \_\_\_\_\_ of motion you can – all the way up and all the way back down.



## Menu of Exercises

<p><b><u>Chest</u></b></p> <p><i>Free Weights (Bars)</i> Bench Press Incline Press Decline Press</p> <p><i>Dumbbells</i> Bench Press Flyes</p> <p><i>Machines</i> Flyes Bench Press Incline Press Decline Press</p> <p><i>Pulley System</i> Flyes</p>	<p><b><u>Back</u></b></p> <p><i>Free Weights</i> Upright Row</p> <p><i>Dumbbells</i> Bench Rows One Arm Rows</p> <p><i>Machines</i> Rows Lat Pull Down</p>	<p><b><u>Quads</u></b></p> <p><i>Free Weights</i> Squats Lunges</p> <p><i>Dumbbells</i> Squats Lunges</p> <p><i>Machines</i> Squats Leg Press Leg Extensions</p>
<p><b><u>Shoulders</u></b></p> <p><i>Free Weights (Bars)</i> Shoulder Press</p> <p><i>Dumbbells</i> Shoulder Press Shoulder Raises – Anterior Shoulder Raises – Lateral</p> <p><i>Machines</i> Shoulder Press</p>	<p><b><u>Biceps</u></b></p> <p><i>Free Weights</i> Preacher Curls</p> <p><i>Dumbbells</i> Curls Hammer Curls</p> <p><i>Machines</i> Curls</p>	<p><b><u>Hamstrings</u></b></p> <p><i>Free Weights</i> Squats Lunges</p> <p><i>Dumbbells</i> Squats Lunges</p> <p><i>Machines</i> Squats Leg Press Leg Curls</p>
<p><b><u>Triceps</u></b></p> <p><i>Free Weights (Bars)</i> Skull Crushers Tight Grip Bench Press</p> <p><i>Dumbbells</i> Triceps Extension (Standing or On Bench) (One Arm or Two)</p> <p><i>Machines</i> Triceps Extension</p> <p><i>Pulley System</i> Triceps Press Down</p>	<p><b><u>Abdominals</u></b></p> <p>Crunches Obliques Crunches Pelvic Roll Ups Ab Machine Crunches</p>	<p><b><u>Calves</u></b></p> <p><i>Free Weights</i> Calf Raises</p> <p><i>Dumbbells</i> Calf Raises</p> <p><i>Machines</i> Calf Raises (Seated or Standing) 1 Leg Calf Raises (with no weight)</p>

## **Chest: Upright Chest Press**



### **Starting and Finishing Position**

Adjust the seat height on the chest-press machine. When you are properly seated, the handles will be under tension. Slowly press the handles outward and hold the outward extension (midpoint position) for a one count. Your elbows will be near locking. Then slowly bring the handles back to your starting position. Repeat.

### **Midpoint Position**



## **Chest: Flat Bench Flyes**

### **Starting and Finishing Position**



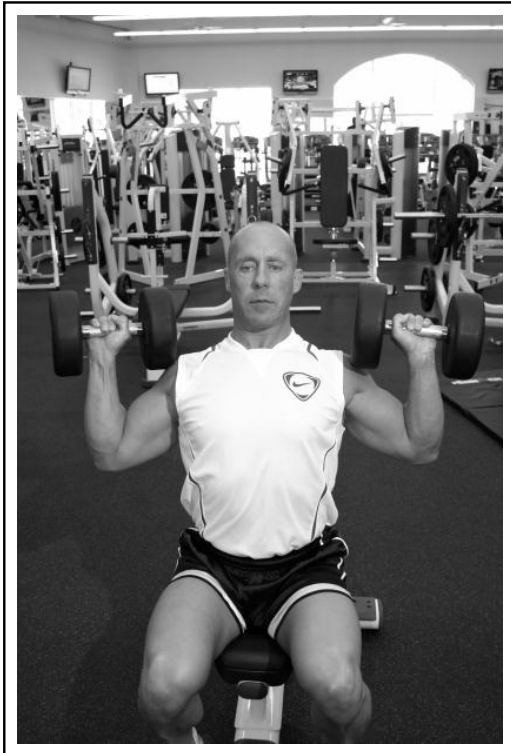
Sit down on the edge of a bench with a dumbbell in each hand. Then lie back, keeping the dumbbells close to your chest and your feet flat on the floor. Then press the weights up, as shown, to start.

*With your elbows slightly bent, slowly lower the dumbbells out to the sides to a point where they are even with the bench. Inhale as you lower. Then, after holding for a count of one, slowly raise them back to the starting position, exhaling on the way up.*



### **Midpoint Position**

## **Shoulders: Seated Dumbbell Press**

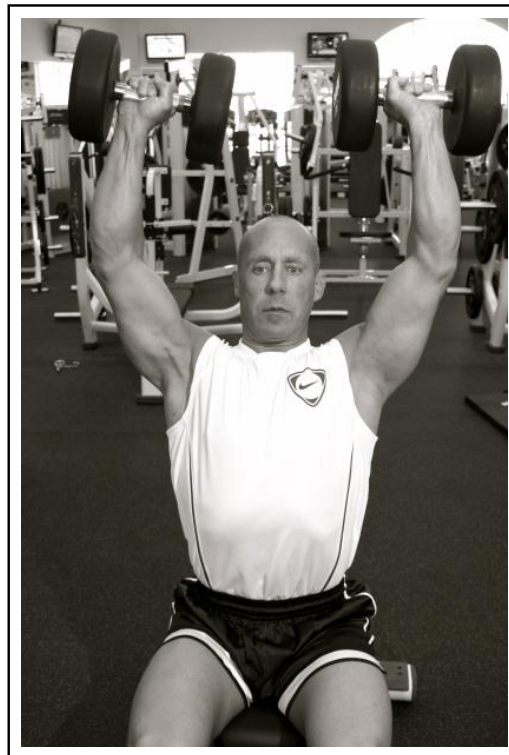


### **Starting and Finishing Position**

Sit on the end of the bench with your feet flat on the floor. Hold a dumbbell in each hand at shoulder height. Keep your elbows out and your palms facing forward.

### **Midpoint Position**

Press the dumbbells upward until your arms are nearly locked out, but not quite. Keep your palms facing forward. Allow the dumbbells to get close to each other at the top of the press. Then slowly lower the dumbbells to the starting position.



## **Shoulders:** Standing Dumbbell Laterals



### **Starting and Finishing Position**

Stand with your feet about shoulder width, your arms down, and your palms facing each other. Then, keeping your arms straight, raise them to each side. It's important to keep your palms facing downward as you raise the weights so that the exercise will work your shoulders rather than your biceps.

### **Midpoint Position**

At the top of the lift, your arms *and your weights* will be parallel to the floor. Hold for a count of one and slowly lower to the starting position.



## **Back: Wide-Grip Pulldowns**



### **Starting and Finishing Position**

First, check that the kneepads on the pulldown machine are adjusted so your thighs fit snugly under them while you are seated. Then, firmly grasp a *wide* bar on the machine so that your hands are separated by about twice your shoulder width (you'll need to stand to grab the bar). Then, holding onto the bar, seat yourself under the personally adjusted kneepads.

### **Midpoint Position**

Slowly pull the bar down to the top of your chest or collarbone area, *but not lower*. Then slowly let the bar up to your starting position, which will still be under tension.



## **Back:** One-Arm Dumbbell Rows



### **Starting and Finishing Position**

Start with your right foot flat on the floor and your left knee resting on a flat bench. Then lean forward so you're supporting the weight of your upper body with your left arm on the bench. Your back should be almost parallel to the floor.

Reach down and pick up the dumbbell with your right hand. Look straight ahead instead of at the floor in order to keep your back straight.

### **Midpoint Position**

Focus on pulling your elbow as far back as it can go. The dumbbell should end up roughly parallel to your torso. After you've lifted the weight as far as you can while still holding the rest of your body in the same position, slowly lower and repeat for the designated number of reps. Then repeat the whole exercise on your left side.



## **Triceps: Close-Grip Pushdowns**



### **Starting and Finishing Position**

This exercise is performed with a high-cable machine. Grip the bar with palms down and slightly narrower than shoulder width. Position your forearms so that they are nearly parallel to the ground to start. Keep your feet shoulder-width apart for added stability, and bend your knees slightly. Your wrists should be kept straight for the whole exercise. Tighten your abdominals to stabilize your upper torso and keep it from swaying.

### **Midpoint Position**

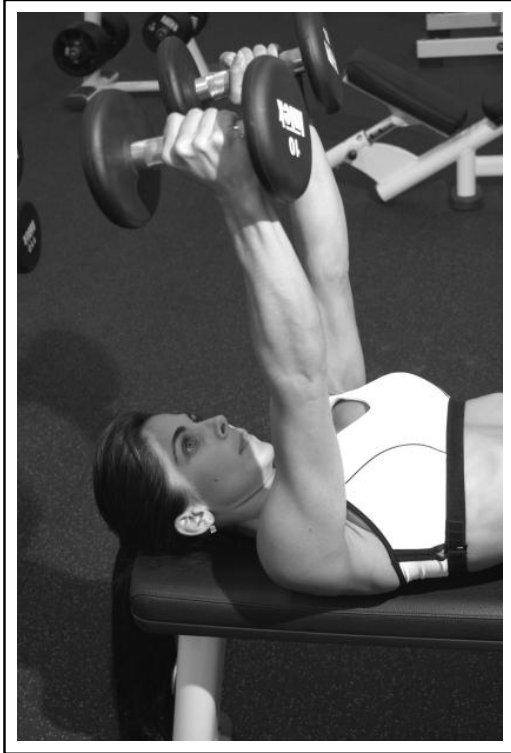
Push the bar down and in toward your legs (a circular motion) until your arms are straight and your elbows locked.

Keep your upper arms close to your body, and make those triceps flex at the bottom of the stroke for a count of one. Then slowly allow the bar to rise to the starting position for the next rep.





## **Triceps: Lying Triceps Press**

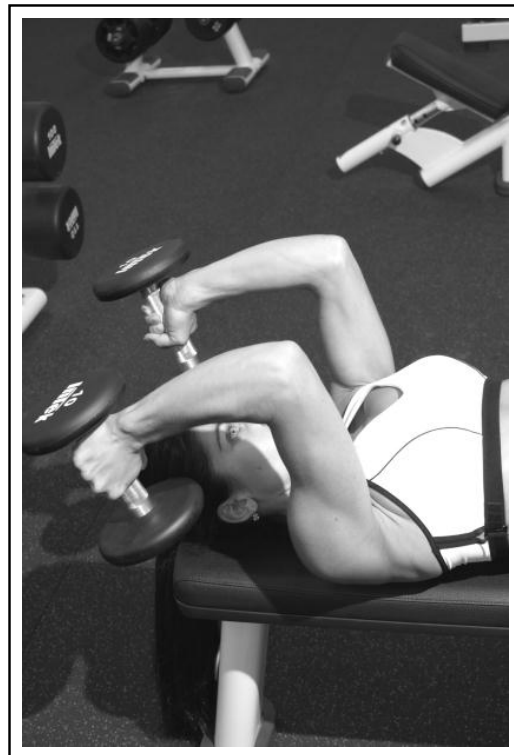


### **Starting and Finishing Position**

Lie down on a flat bench with a dumbbell in each hand, arms extended over your head. You are looking straight up at the dumbbells. Your palms should be facing each other in this position and for the entire exercise.

### **Midpoint Position**

Bend your elbows and *slowly* lower the dumbbells toward your shoulders, not toward your head. Your upper arms should remain stationary, perpendicular to the floor. *Don't let them tip backward.* That's cheating!



## **Biceps: Standing Dumbbell Curls**



### **Starting and Finishing Position**

Stand with your arms at your sides, with a dumbbell in each hand. Your focus should be on lifting the weights by flexing your biceps. You do not “swing” or change the position of *any* body part except your forearms, which curl upward.

### **Midpoint Position**

With your palms initially facing forward, curl both arms, lifting the dumbbells slowly toward your shoulders. You want your biceps to do the work with your other muscles just keeping you in a stable position.



## **Biceps: Preacher Curls**



### **Starting and Finishing Position**

Adjust the machine so the seat is comfortable and you can reach the handlebars easily. Set the weight for your current fitness level. Reach down and grasp the handle bar with an underhand grip, palms facing up. Press the back of your arms firmly against the arm pad and extend your elbows *without locking them*.

### **Midpoint Position**

Tighten your abdominal muscles and straighten your back. Slowly lift the bar upward towards your chin until your arms reach your shoulders. Focus on contracting your bicep muscles at the top of the motion. Then slowly lower the bar back to your starting position, arms extended. Keep your elbows loose. Repeat for additional reps.



## Quadriceps: Leg Extensions



### Starting and Finishing Position

Hook your ankles behind the roller pad of the leg-extension machine. The roller pad should be adjusted to rest on the lower part of your shins, *not* on the tops of your feet or in the middle of your shins. To keep your hips from lifting during the exercise, grasp the handles on the side of the machine to keep your bottom in place.

### Midpoint Position

Straighten your legs, lifting the weight with your quads until your knees are straight. Always try for the fullest range of motion you can—all the way up, and all the way back down.



## Quadriceps: Leg Press



### Starting and Finishing Position

On the leg-press machine, place your feet about shoulder width apart, toes slightly pointed out on the pressing platform. Hold the handles to keep your hips in place as you press the platform upward.

### Midpoint Position

Slowly press the weight upward, being sure to push with your heels rather than your toes. And don't quite lock your knees at the top. Then slowly bring the platform back to its starting position for your next rep.



## **Hamstrings: Lying Leg Curls**



**Starting and  
Finishing  
Position**

Lie face-down on a lying-curl machine. Adjust your position so that the roller pad lies on the back of your ankles. In your starting position, the roller pad may already be under some tension.

Curl your legs up, and bring your feet as close to your hips as possible. Ideally, the roller pad (or pads) should touch the top of your hamstrings. Hold this fully contracted position for a count of one before *slowly* lowering the pad back to your starting position for the next rep.

**Midpoint  
Position**



## Hamstrings: Dumbbell Lunges



### Step Position

In the starting position, stand erect with your feet together and the weights at your side with palms facing each other. The photo doesn't show the starting position. It shows the forward step taken with the right foot as the lunge movement begins.

### Midpoint Position

After stepping forward, bend at your knees and lower your hips until your left knee is just a few inches off the floor. Then push with your right leg, raising yourself back up to the starting point. Then repeat with your left leg. Throughout the exercise, don't lift your (forward) "lunge" foot. Keep it flat on the floor. You need to step far enough forward so that, at the full lunge position, your knee will be above your ankle and not in front of it.



## **Calves: Seated Calf Raises**



### **Starting and Finishing Position**

Position yourself on a seated calf-raise machine with the balls of your feet on the platform and the kneepad on the lower part of your front thigh close to your knee. Keep your upper body still during the exercise, and focus on your calves.

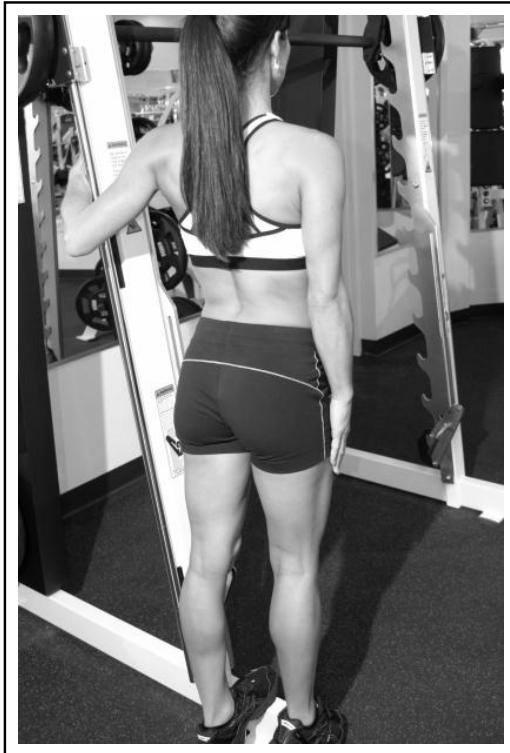
### **Midpoint Position**

Slowly raise your heels as your thighs press against the thigh pads. Flex hard and hold to a count of one. Then slowly lower your thigh so that your heels go as far below your toes as possible, thus stretching your calves to the maximum. Then repeat the next rep.





## **Calves: One-Legged Calf Raise**

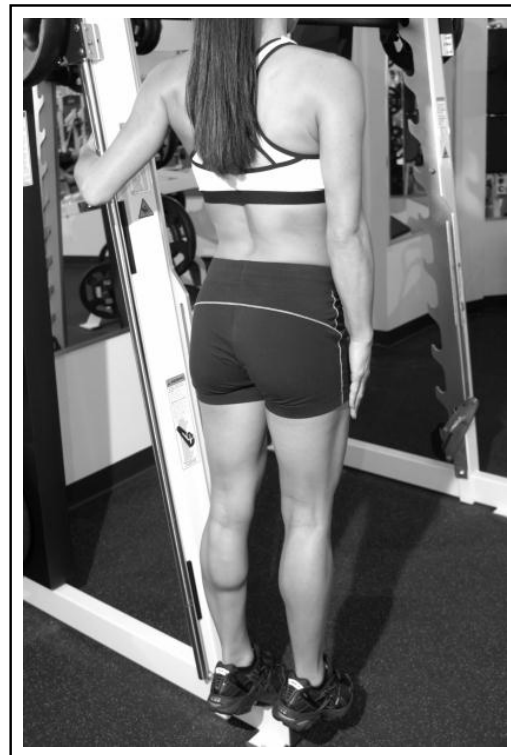


### **Starting and Finishing Position**

Start with the ball of one foot resting on step or block so that your heel can be lowered far below the ball of your foot. You may also hold a dumbbell in the opposite hand to add more resistance to the exercise. Hold onto something for stability during the movement.

### **Midpoint Position**

First, lower your heel below the ball of your foot as far as you can, thus stretching your calf to the maximum. Then press upward on your toe as far as possible, contracting your calf muscle. Hold that position for a count of one, and then repeat the movement for the required reps. Repeat the process for the other calf.



## **Abdominals: Pelvic Roll-Ups**



**Starting and  
Finishing  
Position**

Seated on the end of a flat bench, lay back with your legs extended and knees locked, propping up your torso with your hands (you don't want to start out from a totally flat position because that will place additional stress on your back and also use back muscles at the beginning of the movement rather than your abdominals).

Raise your knees toward your chest while simultaneously lifting your torso with your arms to end up in a "roll-up" position. Slowly return to the starting position and repeat.

**Midpoint  
Position**



## **Abdominals: Twist Crunches**



**Starting and  
Finishing  
Position**

Using an exercise ball to prop up your legs, place your hands behind your head so that your fingers are giving light support to your head as you raise your torso. *Do not lock your fingers together.* Then *smoothly* raise yourself and try to touch your left knee with your right elbow.

Hold your “crunched” position for a count of one. Then slowly lower yourself flat and repeat by touching your right knee with your left elbow. Alternate the left-right crunch as needed for your routine.

**Beginning  
the Lift  
Before the  
Midpoint  
Position**



# Are You Making This "Fat Storing" Mistake Before You Exercise?

By Dr. Mercola

Some scientists argue that if you want to get rid of more fat, you should skip pre-workout eating. Several studies suggest exercising while your body is low on food may be a good way to trim excess fat.

In a recent study, researchers found that cyclists who trained without eating burned significantly more fat.

According to USA Today:

*"Muscles usually get their energy from carbohydrates ... if you haven't eaten before exercising, your body doesn't have many carbohydrates in reserve. That forces it to burn fat instead, scientists say."*

As you can tell from reading the excerpt from the *USA Today* article above, there's plenty of controversy on this issue. There's general agreement that exercising on an empty stomach will help burn more fat, but that's about where the general consensus ends.

Some experts believe it's a bad idea because exercising vigorously when your blood sugar is low could lead to dizziness and poor performance. Others warn that exercising while hungry can lead to overeating afterwards.

I believe the best approach is to use some common sense and listen to your body. A number of individual factors can play a role, such as your age, when you last ate, whether or not you're pregnant, taking medications, your medical history, level of fitness, and the type of workout you engage in.

For example, if you feel weak or nauseous while exercising on an empty stomach, you may want to at least eat a small meal before exercising, and I'll address this further in just a moment.

But first, let's look at the science behind this theory.

There's actually quite a bit of evidence supporting the theory that **you'll burn more fat if you don't eat prior to your workout**. *USA Today* mentions several such studies.

So, how does it work?

## How Fasting Forces Your Body to Shed Excess Fat

All fat burning processes in your body are controlled by your sympathetic nervous system (SNS). The SNS is inherently activated by exercise and lack of food.

The combination of fasting and exercising maximizes the impact of cellular factors and catalysts (cyclic AMP and AMP Kinases), which force the breakdown of fat and glycogen for energy.

So yes, training on an empty stomach is actually a very effective way to force your body to burn fat.

It's also important to realize that eating a full meal, *particularly carbohydrates*, will inhibit the SNS and *reduce* the fat burning effect of your exercise. Instead, eating lots of carbs activates your parasympathetic nervous system (PSNS), which promotes energy storage—the complete opposite of what you're aiming for.

Keep in mind, though, that **the majority of the "fuel" used during most exercise is not coming from the food you have just eaten**. If you're working out at a moderate to high intensity, you're using glycogen and fat that is stored in your muscles, liver, and fat cells. Typically, we have enough of that stored fuel to last for one to two hours of intense to very intense work, or three to four of moderate intensity.

So having said this, if you are consuming a high quality diet, eating every three to four hours, your body may not need anything to eat before you begin your workout. But, some people do have a hard time exercising without eating something first.

Typically these people are more sensitive to changes in their blood sugar levels, which can decline during the first 15-25 minutes of their workout. It is this decline in blood sugar that causes dizziness, faintness, nausea or lightheadedness. This is especially true if you exercise first thing in the morning.

## What to Eat Before Exercise to Really Boost Fat Burning

The flip side of fasting prior to exercise, however, is reduced performance. Fortunately, there's another, perhaps even more efficient way to boost fat burning *without* fasting.

Another recent study published in the journal *Medicine and Science in Sports & Exercise*, demonstrated that **consuming whey protein (20g protein / serving) 30 minutes before resistance training boosts your body's metabolism for as much as 24 hours after your workout**.

It appears as though the amino acids found in high quality whey protein activate certain cellular mechanisms (mTORC-1), which in turn promote muscle protein synthesis, boost thyroid, and also protect against declining testosterone levels after exercise.

In practical terms, consuming 20 grams of whey protein before exercise and another serving afterward will most likely yield the double benefit of increasing both fat burning and muscle build-up at the same time.

Again, not everyone will need to eat something prior to exercise, but if you do, whey protein is one of your best bets.

## **Buyer Beware: Many Protein Drinks Loaded with Toxic Metals**

There are many reasons for choosing whey protein over other commercial protein drinks, but one of the latest problems that has surfaced is the potential for many products to be contaminated with toxic metals.

*Consumer Reports* recently tested 15 different protein drinks, and discovered that some of these products were significantly contaminated with toxins such as arsenic, cadmium, lead and mercury.

Three of the products tested contained some or all of these toxins at levels that could pose a health hazard if you consume three servings a day.

Clearly, dousing your system with toxic metals will do more harm than good, so as with most other foods and food supplements, knowing what to look for is very important.

## **How to Select a High Quality Whey Protein**

Whey protein is a by-product of dairy, so for starters you'll want to make sure the whey you're buying is derived from organic, grass-fed, non-hormonally treated cows.

It should also be minimally processed in order to preserve beneficial immuno components such as immunoglobins, bovine serum albumin, lactoferrins, and other key amino acids and nutrients.

Most commercial whey products are derived from pasteurized dairy and processed with heat and acid, which destroys most of the whey's fragile molecular structure. Many of them also contain artificial sweeteners, which come with their own set of health hazards. And contrary to popular belief, artificial sweeteners actually *sabotage* your weight loss efforts by impairing your ability to regulate your appetite naturally.

In addition, you'll want to look for medium chain fatty acids (MCTs), not long chain fatty acids, as this makes the whey protein much more digestible.

## **Additional Health Benefits of Whey**

In addition to raising your fat metabolism when consumed before and/or after exercise, whey protein has been linked to a variety of other health benefits, such as:

- Helping your pancreas-produced insulin work more effectively, which helps stabilize your blood sugar levels

- Promoting healthy insulin secretion
- Helping to promote your optimal intake of proteins, fats, carbohydrates, vitamins, and minerals needed for your overall wellness
- Supporting your immune system, as it contains immunoglobulins
- Maintaining blood pressure levels that are already within the normal range

## **A Great Way to Start Your Morning**

Personally, I typically exercise first thing in the morning, before eating, and then have a whey protein shake for breakfast. This ensures that I get my exercises done before anything has the opportunity to derail my plans, and gives me plenty of energy for the day ahead.

I prefer not eating before working out, but if you feel you need to eat something before you get going, whey protein is definitely one of your best options. It'll curb your hunger while still optimizing fat burning.

You can't get anywhere near the same benefits from eating a standard American breakfast loaded with carbs...

It should be noted for clarity, however, that whey protein is NOT a weight loss supplement, in and of itself. Without the exercise, it will not magically help you lose weight.

## **Exercise Right for Optimal Fat Burning**

Last, but certainly not least, since we're talking about fat burning it's important to realize that the type of exercise you perform will also have a major impact on this process.

I recently coined the term "peak fitness" to highlight the importance of high intensity interval training for optimizing your overall fitness and weight loss. It's a comprehensive program that includes aerobic, strength training, core exercises and stretching, but the major addition are the peak exercises you perform once or twice a week.

These high intensity, sprint-type exercises raise your heart rate up to your anaerobic threshold for 20 to 30 seconds, followed by a 90 second recovery period. You then repeat this cycle for a total of eight repetitions.

These cycles are preceded by a three minute warm up and two minute cool down so the total time investment is about 20 minutes, as opposed to your regular hour-long treadmill session.

When combined, the peak fitness program along with whey protein as a before and/or post-exercise meal can help you normalize your weight and optimize your health.

[USA Today June 4, 2010](#)

## Do You Know How to Burn Fat?

The question, “Do you know how to burn fat?” seems deceptively simple to answer. Most people would say, just eat less and you’ll burn fat. But they would be wrong so often that it’s ludicrous. Here are some reasons why:

- Hunger is a powerful physiological and emotional urge. *Very few people can simply eat less as a way of life while they are hungry!* Most often, hunger is not directly related to calories ingested, especially in unhealthy individuals who follow poor habits.
- Reducing calories - which the body may interpret as a stress - may scare your body into a conservative, fat-storing mode where lean tissue is burned for fuel before fat stores are released.
- A stressful, cortisol-drenched life will tend to store fat and burn muscle and bone.
- If you fuel your workouts with too few carbohydrates, you’ll end up burning lean tissue before you burn fat.
- You have to be healthy to burn fat efficiently and maintain your status once you achieve it! If your hormones are out of whack because of stress or other issues, *it may be impossible to burn fat* even with tons of exercise and calorie reduction. Many people - who do not sneak extra food in secret - can verify this. It’s all about hormone health.
- Many people confuse losing weight with burning fat. They are not necessarily the same thing.

### Here are a few things to consider:

1. You must control your cortisol levels if you want to burn fat. You must know how to do that. This means, among other things, that you must get healthy if you want to control your fat burning.
2. Even at rest, a pound of muscle burns seven to ten calories per day while a pound of fat burns only two. However, the average adult just doesn't put on enough lean muscle mass to make this difference significant.
3. Muscle is more dense and aesthetically shaped than lumpy fat, so a person with less fat and more muscle will look smaller even though they weigh the same. For example, a woman weighing 150 pounds with 19% fat will look *much* smaller, will look better, and be much healthier than a woman at 150 pounds with 35% fat. They weigh the same, but *their body composition is different!*



A scale isn't very helpful to measure success in fat burning *if you only want to burn fat.*

**Here's an important question:**

If you find yourself losing weight and taking up less space, do you know how much of that weight loss was fat and how much was lean tissue - the tissue that you *don't* want to lose?

If you don't follow a program such as *Reclaim 24*, you may be able to lose weight, but it may also include a large percentage of muscle. The irony is that muscle tissue burns significantly more calories, 24/7, than does fat. If you have lost weight but have burned lean body tissue away in the process, your likelihood of *maintaining* your weight loss decreases dramatically.

If you only have a small amount of weight to lose, then you may feel as though the *Reclaim 24 System* is not helping you lower the pressure on your scale. But *Reclaim 24* is not a scale-protection program! It is a wellness, rejuvenation, and appearance program. In fact, if your particular body composition requires it, you may even find your scale numbers going up a bit. But you will shrink, look better, be healthier, and have more energy when you transform yourself with *Reclaim 24*.

So, you must decide what program you want to follow. While you are deciding, **don't forget to look at the long-term success (beyond five years) that others have had on any weight-loss program you are considering.** It's not a month, or a year, that counts (and that's normally all you'll hear about). A person must be able to maintain her weight and body composition for at least five years to say she has found a program that works. *And don't forget to look at their health.* Being trim, sick, and stressed is hardly a lifestyle worth living. Please don't get trapped into short-term, quick-fix, emotion-driven thinking that promises short-term success but delivers simply awful, long-term consequences.