



AL SEARS, MD HEALTH CONFIDENTIAL *FOR MEN*

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Build the Heart of a Warrior And Stop Breaking It Down With Grueling Exercise

The American Heart Association tells you that any “cardiovascular exercise” will make your heart stronger. That would be great ... if it were true. But the truth is that modern exercises commonly recommended for your heart actually make it weaker. They can signal your heart to become smaller, with less capacity to adapt to changing demands.

Among the worst exercises for your heart are the most popular: long-duration exercise. This is why endurance runners can drop dead in the peak of “cardiovascular health”. Let me explain.

First, your heart doesn't need endurance training. It has never stopped beating throughout your lifetime. Isn't that enough endurance? If you repeatedly train your heart to adapt to moderately high output for longer and longer intervals, it will have to give up other things—such as strength, maximal power and reserve capacity. But those are exactly the attributes your heart needs.

Strength, power and reserve capacity allow your heart to meet real-world demands. The only way to build up strength in your arms or legs is to physically challenge their power. Your heart is the same way. You need to challenge its power, not endurance, to make it stronger.

Today, I'd like to show you different kinds of exercise to improve your heart's strength and adaptability. And the best part is you can do them in less than ten minutes a day.

Are You Running to an Early Grave?

My first realization that long-endurance cardiovascular exercise weakens your heart came at a marathon. Throughout the race, pale runners stopped to check heart function at preset cardiac booths. Exhausted racers collapsed at these booths as their heart rates went violent.

I will never forget helping ready a collapsed runner for transport to the hospital. He appeared to be in his early 30's but he couldn't answer my questions. He clutched his chest with both hands. His eyes rolled back

in his head and his lips turned blue as I put on an oxygen mask. Even as a medical student, it was obvious. He was having a heart attack.

I encountered another runner in heart trouble less than 20 minutes later. He was on a stretcher awaiting emergency evacuation. He had stumbled to the triage station with a sudden onset of weakness and dizziness. He had a dangerous type of irregular heart beat I had seen before in elders. But this frightened young man was barely 20.

According to conventional wisdom, endurance cardiovascular exercise protects the heart. These athletes should have had the strongest hearts on the planet. Yet they were dropping like flies from heart problems usually found in the very sick or elderly. Something was definitely very wrong.

I decided that day that I would never condition myself to run long distances. The idea of running for miles everyday never excited me anyway. And, thankfully, it's just not what your heart needs. Lack of endurance isn't the cause of heart attacks.

A Heart Attack Waiting to Happen

Most heart attacks occur in one of two situations. One is during a period of rest. You may be watching TV after dinner. In these cases there is a spasm of the coronary artery or a blood clot that blocks blood flow to the heart. Endurance is not a factor.

Researchers in Barcelona, Spain found that long-duration exercise predisposes athletes to this kind of heart attack by increasing triglycerides and oxidation of cholesterol. After a continuous run, researchers took blood samples from the runners. The long-duration exercise increased both the blood levels and oxidation of LDL (bad) cholesterol and triglycerides. The oxidation of these substances is often a trigger of heart disease.

Worse yet, a report in the *American Journal of Cardiology* found that endurance runners had something ominous

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Build the Heart of a Warrior

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lurking in their blood after their runs. The runners all had disrupted balances of blood thinners, elevated clotting levels, and elevated inflammatory factors.² All of these factors are common in people experiencing heart distress!

To prevent this kind of heart attack, you must prevent abnormal inflammation and oxidation of the arteries. You can find my specific program for this in the article "Put Out the Fire: Extinguish the Real Cause of Heart Disease" in your December, 2003 *Health Confidential for Men*.

The Sudden-overload Heart Attack

The most feared and most common heart attack occurs when your heart experiences a sudden increase in demand. You may lift a heavy object, receive a sudden emotional blow, have a strenuous orgasm, be frightened or be in some sort of fight. The sudden demand for cardiac output exceeds that heart's capacity to rapidly adapt. You can prevent *this kind* of heart attack with a different approach to exercise.

You must strengthen your heart so that it can provide greater cardiac output on demand. But you can't do this by exercising for long periods. If you exercise *continuously*, for more than about 20 minutes, you actually induce the opposite response. You are forcing your heart to become more efficient. Greater efficiency means "downsizing" your heart. You give up maximal capacity because smaller can go further.

Think of it this way: a Pinto can go further than a Ferrari with the same fuel. If you take frequent long trips but never have to go very fast or carry a heavy load, you are better off with the Pinto. But if some hooligans unexpectedly threaten you on the road—you'd be glad you had the power and speed of the Ferrari on hand.

This is a simple concept. But can you increase your heart's maximal speed, power and reserve capacity? The answer is an unconditional **yes**, you can. I did it myself years ago. Many hundreds of my patients have done it since. Now you too can power up your heart, but you have to be willing to drop the old conditioning methods.

Cranking-up Your Heart's Power

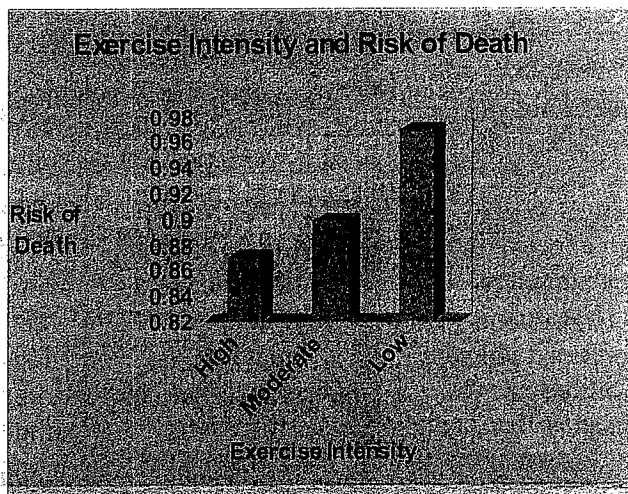
In last month's letter, I showed you how my P.A.C.E.[™] (Progressively Accelerating Cardiopulmonary Exertion) program can help you more efficiently burn fat. It mimics the demands of your natural environment to keep you lean. With some slight modifications, P.A.C.E.[™] is also the best program to strengthen your heart. It has produced dramatic results in my cardiac patients.

P.A.C.E.[™] is a progressive plan that focuses on short bouts of high-intensity exercise. These principals are pre-

cisely what strengthen your heart. Exercise is best when you do it at a high-intensity level. But high-intensity exercise can be grueling to do and may be dangerous, especially in elders.

The solution is two-fold. One, increase the intensity only gradually as you become used to the exercise. Two, break exercise into very short bouts.

When you do this it's actually more enjoyable, more effective and safer than longer exercise at lower intensity, and I can prove it. In fact, studies prove that exercise at a high level of intensity lowers the risk of coronary heart disease and increases longevity.



Much information about heart health has come to us from a large Harvard Health Professionals Study. Researchers followed up with over 7,000 of the study's participants. They found that the key to exercise is not the length of time. It is the intensity of effort.

The more energy a man exerts, the less risk he has of developing coronary heart disease.³ And these men have a lower chance of having a heart attack.

High-intensity exercise can also make you live longer. Another Harvard study compared vigorous and nonvigorous activity in association with risk of death. Those who performed more vigorous activities had a lower risk of death than those who performed less vigorous activities.⁴

The best way to get highly intense workouts is to break the activity into short bursts. It is much easier to maintain higher intensity if it is only for a short period. And be sure to rest a little in between bouts of activity for best results.

Now, let's see how you can adapt P.A.C.E.[™] to your heart.

P.A.C.E.[™] Your Heart

To use P.A.C.E.[™] effectively, your exercise program must be *progressive*. This means gradually applying more

effort to your workout each week. And, remember, you're increasing the intensity of your exercises, not the duration. Begin light and gradually pick up the pace or add resistance as your capacity increases.

The second principle of P.A.C.E.™ is *acceleration*. In other words, get up to speed a little faster in the next session than you did in the last. When you are deconditioned, it will take several minutes to gear up your breathing and heart rates. As you get more accustomed to the challenge, you will respond faster.

As you get into better shape, you will increase the intensity in each session and increase the intensity earlier in each session. When you apply these principles you are conditioning your heart to gradually improve its speed at adapting to sudden increases in demand. This capacity for acceleration is key to preventing heart attacks.

You must do one other thing differently than standard exercise of the past. As your conditioning increases, *decrease* the duration of the exercise interval. Use briefer and briefer episodes of gradually increasing intensity. This avoids trading endurance for maximal power.

My P.A.C.E.™ Plan, Modified to Strengthen Your Heart:

- ✓ Start with 20 minutes every other day at a gentle pace.
- ✓ Break those 20 minutes into two 8-minute intervals with 4 minutes of rest in between as you get into better shape.
- ✓ After a few weeks, break those 20 minutes into four 4-minute intervals with 2 minutes of rest in between.
- ✓ Continue to break your exercise into shorter intervals at your own pace.

When you are well conditioned, you will be using "mini-intervals". For instance, my intervals for biking are less than a minute followed by a minute of rest repeated for eight intervals.

You can use any activity that will give your heart a bit of a challenge. My favorites are swimming, biking, running and elliptical machines. I switch off between them to keep it fun and lower the chance of "overuse injuries." What you use will depend on your level of fitness. The important thing, again, is that the challenge advances gradually through time.

Monitoring Your Heart's Progress

Your heart rate is a great way to monitor your heart's adaptation. It is the sole measurement that focuses on your heart's performance. You know that you are giving your heart a challenge by checking its rhythm. Your goal is to raise your heart rate, raise it fast, and recover

8 Weeks To A Warrior Heart: Your Target Heart Rate

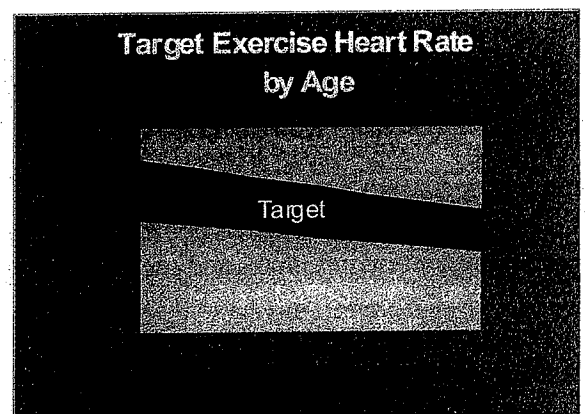
Week			
1&2 (55%)	3&4 65%	5&6 (75%)	7&8 (85%)
110	130	150	170
105	124	143	162
99	117	135	153
94	111	128	145
88	104	120	136
83	98	113	128
77	91	105	119

quickly afterward.

You can take your pulse on your wrist or neck. You will need a watch with a second hand. Count your pulse for 15 seconds and multiply by 4 to get your heart rate. You can also get fast and accurate results with an exercise heart monitor. They are available over the Internet and in most fitness shops. I wear a heart rate watch that gives me my pulse continuously while I exercise. I bought one made by Timex for \$100 at Wal-Mart.

In order to challenge your heart, you first need to understand how fast it can go. This is your *maximum heart rate*. It is a good approximation of how fast your heart can safely go for short bursts. You can find your maximum heart rate by subtracting your age from 220. So if you are 55 years old, your maximum heart rate is 165.

In order to create a challenge, you will stimulate your heart to beat at a pace that is 55-85% of your maximum heart rate. This is your *target range*.



Challenging your heart is safe and effective because you do it in small steps, over the course of several weeks. This is not about *pushing* your heart to do this all at

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Build the Heart of a Warrior

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once. You need to coach your heart to beat faster a little at a time. Eventually you will also coach your heart to beat fast sooner in your workout. This *coaches* your heart to become a "warrior," ready on demand.

I've laid out an 8-week program that will safely build your heart into a powerhouse. Use the graph to find your age. Every 2 weeks you will need to exercise more intensely in order to boost your heart rate higher, faster.

At first, you should expect your heart rate to be at the lower end of your target range. But as the weeks go on, challenge your heart a little more. With time, you not only challenge its rate, but also challenge the rate to rise higher faster.

After the 8-week program, take a week off. Now start back at the beginning but use a more vigorous exercise to induce the same cardiac response. For instance, if you walked during the first cycle, add short bursts of jogging now. If you used circuit training, increase the resistance for the second round.

Soon, you could have the heart of a man half your age. That's what happened to me. Conventional tables do not account for what happens if you exercise to specifically improve your heart's responsiveness. Yet, thanks to P.A.C.E.™, my heart routinely exceeds the published targeted performance of a 20 year old. You can use the same techniques to increase your heart's strength and capacity.

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4 Lee I., et al. *JAMA*. 1995 Apr 19;273(15):1179-84.

MEMOS FROM MY CLINIC

Battling Alzheimer's with Nutrition

Dr. Sears,

My father is suffering from Alzheimer's. As a son, it is very difficult to watch your father just fade away. I was wondering if you knew of any natural remedies that might help him.

Adam Galvan, Bend, Oregon

Fortunately, your father is living in an era that is focusing a lot of time and money on Alzheimer's research. We know that certain vitamins and essential fatty acids can help brain function. Phosphatidylserine, acetyl-L-carnitine, coenzyme Q10, and vitamin B₁₂ are among the most useful supplements.

- ✓ **Phosphatidylserine (PS)** is vital to brain functioning. It is highly concentrated in brain cells. Its job is to house neurotransmitters (chemicals which carry signals in the brain) and regulate their release. As we age, we need more help from PS. PS supplementation can make the difference with memory. I recommend taking 100-200 mg of the PS a day.
- ✓ **Acetyl-L-Carnitine (ALC)** is another exceptional brain supplement. ALC provides a range of brain protection, improving mood and memory. It pro-

TECTS the brain from damage due to poor circulation. ALC helps injured nerve cells to repair and function normally again. ALC also increases the release of memory neurotransmitters. I recommend taking 250mg daily.

- ✓ **Coenzyme Q10 (CoQ10)** helps to produce energy in every brain cell. CoQ10 also protects the cell from byproducts of that energy. Free radicals can damage brain cells. CoQ10 destroys these free radicals. I recommend taking 30-100mg of CoQ10 daily.
- ✓ **Vitamin B₁₂** is another brain booster. Vitamin B₁₂ plays a role in creating and maintaining the protective coating around neurons. The coating also helps to conduct messages. I recommend taking 500mcg of Vitamin B₁₂ daily.

We have recently discovered that exercise halts the physical and mental degeneration brought on by Alzheimer's. The October issue of *JAMA* published the proof. Researchers found that Alzheimer's patients who exercised at least 60 minutes a week showed more improvement in physical function and depression than those who did not exercise.

So get your father moving. Some light stretching, balance exercises, and a bit of weight training could help him feel better.

★ Coming Next Month ★

Secrets to Feeling Young Again: Unlocking the Genetic Control of Aging
The Only 2 Stretches You Really Need to Stay Loose, Limber and Pain-free
Beat Toxicity and Stress: The 5 Best Ways to Detoxify

TRASH YOUR JOGGING SHOES AND GET LEAN IN 10 MINUTES A DAY

Dear Member:

Long duration exercise is a waste of your time.

In today's message, you will learn a more effective way to burn fat and keep it off. It only takes a few minutes per day. The system is simple. And if you follow it, you will simultaneously transform your physique, increase your available energy and increase the capacity of your heart and lungs.

When you exercise for more than 15 minutes, you utilize mainly fat for energy a good thing, right? Wrong! This will induce your body to build more fat. It is preparing for the next exercise session when it will need fat to fuel the long duration.

Researchers at Laval University in Quebec wanted to find out which type of exercise program was best for fat loss. Participants were split into two groups. A long duration group cycled, uninterrupted, for 45 minutes. An interval group cycled, in numerous short bouts (lasting from 15 to 90 seconds), resting in between.

The long endurance group burned twice as many calories as the interval group. But for every calorie burned, the interval group lost 9 times more fat.

Burn fat during recovery.

The reason for this phenomenon was uncovered in another recent study. Colorado State University researchers measured how long fat continues to be burned after brief periods of exercise. Participants exercised for two minutes then rested for one minute. They continued this cycle for 20 minutes.

The researchers found that participants continued to burn fat, at a high rate, 16 hours after the exercise ended. Even while they rested their fat oxidation was up by 62%.

Another study done at Stanford University School of Medicine tried to find out how long people needed to exercise to get this benefit. The study demonstrated that ten intense minutes of exercise is enough to burn body fat.

And in average, non-athletic Americans, the prestigious Harvard Alumni Health Study has confirmed that ten-minute bouts of exercise promotes health and weight loss.

If you want to lose fat, exercise in short bursts. You will then burn much more fat during the recovery period. And by doing this repeatedly, you teach your body that it needs more energy stored in muscle for fast access. And you teach it that storing energy as fat is inefficient because you never exercise for long enough to make good use of the fat during the exercise.

You can use a wide variety of exercise tools. It only has to be an activity that will give your heart and lungs a bit of a challenge. I like bicycling and swimming because they avoid overuse injuries. What you do will depend on your level of fitness. The important thing is to advance gradually through time. Here are tips on getting started.

*Do a light warm up and stretch before each exercise session.

*Start with 20 minutes every other day. (This averages to only 10 minutes per day).

*Start easy and increase gradually.

*As you get into better shape, you will increase the intensity in each session.

*Begin breaking those 20 minutes into shorter "mini-intervals" of exercise and rest.

*Use briefer and briefer episodes of gradually increasing intensity.

*A light activity "cool down" for a couple of minutes has been shown to reduce muscle soreness after exercise.

Note: The most common error is to assume that you must work at a higher level of perceived exertion to get results. This is not true. The point is to start with what is a comfortable level of exertion for you. But as that level of activity gets easier, you will focus on increasing the level of the activity, rather than the duration.

To Your Health,

Al Sears MD

Al Sears MD

Stay Limber at Any Age

2 Stretches, 2 Minutes a Day for Youthful Flexibility

As you age, you tend to lose flexibility. Certain muscles shorten and your joints lose their range of motion. Routine daily activities become intimidating challenges. I've treated patients who no longer had the free movement they need to dress themselves. This doesn't have to be your fate.

An intelligent stretching regimen can prevent or even reverse this condition. This solution is simple, pleasant and takes only a couple of minutes. Yet most of the popular advice you see on stretching is time-consuming and boring. It's sometimes contradictory and, in many cases, more harmful than helpful.

Fitness gurus sometimes recommend excessive stretching of up to 45 minutes daily. Some have an obsessive-compulsive tendency with their stretching routines. I often see programs to "stretch out your joints." Stretching your joints is a bad idea because joint laxity produces instability and weakness.

It's a shame to see people spend all that time and effort only to increase their risk of injury. All you really need is the lengthening of certain muscles. There are only a few muscles involved in most men's loss of range of motion. This is key.

Today I'll describe the two simple stretches everyone needs. You can do them in only two minutes a day, and once every other day once you regain your flexibility. I'll also give you some tips from my experience as a sports trainer for additional stretches for sport-specific activities.

Flexibility is a Sign of Youth

Losing flexibility as we age is the rule. Particularly, if you never stretch. You accelerate the loss if you sit all day. Proper stretching can slow the decline dramatically. Maintaining youthful flexibility can ward off the aches and pains associated with aging and inactivity.

Before you stretch, you should understand this important distinction: Tendons attach your muscles to your bones while ligaments attach bones to bones. Healthy stretching helps lengthen muscles and strengthens tendons but shouldn't put pressure on ligaments.¹ However, many of the stretches routinely recommended put stress on the ligaments connecting the bones of a joint.

Contrary to popular belief, you don't want loose joints. The tighter they are, the more stable and stronger they are. The stronger they are, the less likely they are to suffer injury and the less pain you will feel. What you want is long and relaxed muscles that can lengthen without resistance on demand. This is critical in a couple of

key muscle groups.

Before you start a stretching program, I need to point out one more distinction. Passive stretching does nothing to warm you up. Use these stretches after activity or exercise. I recommend my P.A.C.E. program for cardio.

I agree with my colleague Bob Arnot, M.D., who said "Stretches make a poor warm-up. Studies have shown that they create more injuries than they prevent when muscles are cold and stiff. A muscle shouldn't be stretched until it's warm and pliable."²

Two Stretches, Two Minutes

You don't need marathon stretching sessions. My *two stretches, two minutes* program will help you maintain natural flexibility for life.

The two parts of your body that you should stretch daily are the front of your shoulders and the front of your hips.

➤ **Shoulder Stretch**—You need to stretch these muscles because they shorten from most types of work. Weight lifting will cause further shortening of the muscles on the front of the shoulder joint. I agree with Matt Furey, author of *Combat Fitness*, calisthenics are much more effective in strengthening ligaments and tendons.³ There is also a lower risk of injury with calisthenics than there is with weight training. From a naturalist's perspective, lifting weights poorly mimics activities like lifting, throwing, running, walking, jumping, and swimming.

How To: Stand in an open doorway. Raising your arm to a 90-degree angle with palm facing out, press your hand and shoulder against the wall and doorjamb. You should feel the wall against the inner part of your elbow. Slowly, increase the tension as you push forward. Hold for a 10 count. Then repeat with the other arm.



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➤ **Hip Flexors**—You need to do this stretch because sitting causes shortening of the muscles of the front of the hip, particularly if you sit for long periods (and who doesn't?). Ninety percent of American adults experience lower back pain at some point. Stretching your hip flexors muscles several times a week will help prevent this.

How To: Stand in a modified runner's stance, with right foot forward and left foot back, feet flat on floor. Put your hands on your hips and keep your back and hips in straight alignment. Push forward with your hips, while maintaining your erect posture. Slowly, push your hips forward only until you feel a comfortable level of tension. Hold for a 10 count. Switch sides by reversing your leg stance and repeat.



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Some sports require additional stretching. For example, if you enjoy kayaking or rowing, you need to stretch your deltoid (back) muscles. Another example would be running or martial arts, where it would be helpful to stretch your hamstrings and quadriceps (thighs).

A good source for technique and sport-specific stretches with photos is: *Relax Into Stretch: Instant Flexibility Through Mastering Tension* by Pavel Tsatsouline. It is available through amazon.com.

If you are chained to your desk, try Stretchware. For \$24.95, you can purchase their software. It will remind you to take a break and stretch at work. A free 30-day demo download is available at their website (www.stretchware.com) as well.

Stretching Tips for Injury Prevention

- ✓ Don't hurry! You should be in a relaxed state of mind before stretching.⁴
- ✓ Warm up your shoulders by doing circles with your arms before stretching.
- ✓ Walk around the block before stretching your hip flexors.
- ✓ Stretch your shoulders and hip flexors after your warm-up and after exercise.
- ✓ Wait the tension out; don't force it.
- ✓ Don't bounce; hold the stretch for a 10 count.
- ✓ You should feel tension, but no pain.
- ✓ Don't stretch through pain; stop! And modify how far you push the muscle.

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The Truth about Mad Cow Disease

(Continued from page 5)

(www.ervins.com), and Morris Grassfed Beef (www.morrisgrassfed.com).

Here's one of my favorite ways to prepare a grass-fed steak:

Dr. Sears' Burgundy Beef

Burgundy Marinade

- 1/2 cup Burgundy wine
- 1/2 cup beef broth

Add fresh basil, parsley flakes, and black pepper to taste. Let steak marinade for at least 3 hours, even better overnight. Grill it or broil it. Save Marinade.

Burgundy Sauce

- Put marinade in a small sauce pot.
- Add more beef broth as needed.
- Add a 1/2 teaspoon of a thickening agent like flour or cornstarch
- Bring to a rapid boil, stirring constantly with a whisk.

Let simmer for 3 minutes on low-medium heat covered. Remove from heat and let stand 1 to 3 minutes or until thickened.

Serve over steaks. Grill up or steam up some veggies to serve with it.

I also like to add sauteed mushrooms and Vidalia onion to the Burgundy sauce.

Bon Appetite! Enjoy your beef in good health and with peace of mind.

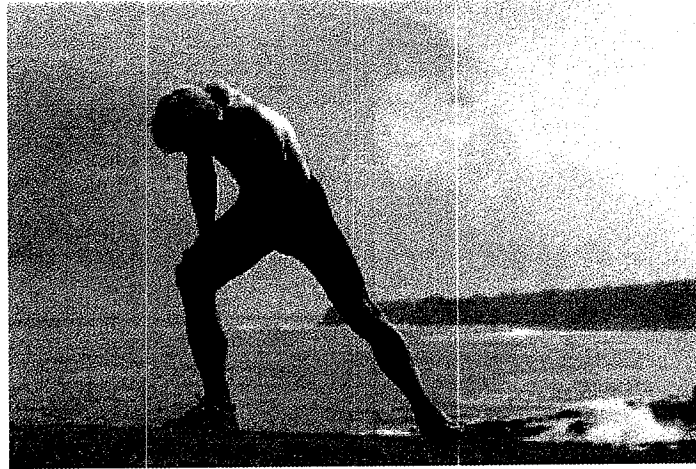
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Everything You've Been Told About Exercise Might be Wrong

<< Part I

By Ryan Lee

Now I have to admit, almost all of the training and education I had in my beginning years in the fitness industry told me 'aerobic' training is best for burning fat and overall health.



But as I began to dig deep into this theory I started to find some flaws in this thinking.

My view began to change when I started to pay attention to other athletes. You see, I ran competitive track and field in college and I was a sprinter. In essence, I never really ran more than 200 meters at a time (the length of 2 football fields). And most of the time, I ran only 100 meters.

My fellow sprinters and I all trained the same way: short bursts of speed and zero distance running. We worked out at a very high intensity and took some rest to recover before we sprinted again. We never did distance running -- just sprints with rest (called interval training)

And all the 'distance' runners trained similarly: they ran mile upon mile upon mile.

So here was the interesting thing? myself and all of my fellow sprinters looked really lean, muscular and athletic. We all had low body fat and the type of physique most people aim for.

But the distance runners looked different. They had a rail thin appearance. Even their faces had a drawn look. In other words, they just didn't look healthy.

Why does this seem to be the opposite of everything we've been told?

How can this information help you?

Stay tuned for Part III as I begin to go into more of my findings and how this can help you get fit -- quickly!

Ryan Lee is a fitness expert who's helped over 100,000 people get fit through his

training programs, workshops, coaching and online training. He's the founder of Quatro Fitness: 'The World's Fastest Workout' program.

Dr. Mercola's Comment:

I am very excited to announce that we have a new partner in our efforts to offer you practical tools to implement your exercise program. I met a personal trainer, Ryan Lee, in Washington DC earlier this year and was amazed by his enthusiasm and practical program that he developed.

He is making quite a dent across the country. I have personally been using his four-minute exercise program to supplement my own cardio workouts and have been amazingly impressed. Not only are his workouts simple and easy to perform, but they are easily fit into most everyone's lifestyle as they only take four minutes!

But let me warn you that if you do get this program it would be wise to only do it for one to two minutes the first few times. I know you are thinking, how could four minutes of any exercise possibly make you sore? Just trust me on this one. Do the exercises for one to two minutes initially, and you can always increase them later. You will thank me for this warning.

I personally do these exercises on the days I am not running and find it to be a wonderful addition to my exercise regimen -- a great balance to my aerobic running.

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We've recently been named by Men's Fitness as the World's Fastest Workout. If you're looking for fast workouts that will get you fit in a hurry, you've come to the right place. [Click here to read the story.](#)

The Quatro Fitness Program is designed to **rev up your body's metabolism** to facilitate a stronger, leaner, more athletic build 91% faster than traditional workouts (in as few as four minutes!)

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The "No Workout" Workout

By Paul Chek, HHP, NMT
Founder, C.H.E.K Institute

How many times have you gone to a trainer, therapist, doctor, or even a coach and had them assess your overall stress levels prior to prescribing an exercise program for you? Probably, seldom, if ever ...

Most gym exercises, sports conditioning exercises, even crunching and pumping in front of your TV (as you make yet another attempt at a six-pack or buns of steel) are **catabolic or tissue destructive activities**. This is why you typically get sore after a good workout or a 10K run: You have broken down tissue.

All catabolic exercises require the body to repair the damage done by the exercise. If you have an adequate level of hydration, a sound diet and adequate rest and are not overly stressed at an emotional, mental or spiritual level, your body will produce an anabolic, or tissue-building, rebound.

This rebound is dependent upon a variety of anabolic hormones including:

- Testosterone
- Human growth hormone
- Insulin-like growth factor (IGF)
- DHEA

As you can see in Figure 1, when we are exposed to any combination of stressors that elevate our stress hormone levels beyond the optimal, our repair hormones are suppressed. Typically, in athletes this results in over-training syndromes, while in bodybuilders and other people wanting to add muscle or change their body shape, it simply results **in a lack of progress**.

In fact, a failure to understand this very basic stress-recovery relationship is a big reason for the excessive use of metabolic stimulants and anabolic steroids in bodybuilding, sports conditioning and even among general gym rats. For example, many athletes, bodybuilders, and even some of you reading this, begin the day eating too many carbohydrates (often processed) for your metabolic type. This elevates your blood sugar, triggering a release of insulin to lower your sugar level.

The process continues until your blood sugar is too low, causing glucocorticoids (stress hormones) to be released. Then, these stress hormones trigger the discharge of stored glycogen in the liver -- a response designed to elevate blood sugar.

This cycle of decreased and elevated blood sugar levels typically happens repeatedly throughout the day due to the combination of eating meals and snacks that are metabolically imbalanced and drinking any number of caffeinated sugar drinks. Throw in some work stress, relationship challenges and a traffic jam and you've got a tired body in the gym, morning or night. Then comes Red Bull!

That's often why the diligent, committed and vain alike, who often find themselves lacking that perceived return on their investment in the gym, frequently turn to the many splendors of modern chemistry for help. The result being a short-term gain and long term dysfunction in the form of hormonal imbalances, chronic fatigue and even disease!

Applying the "Less is More" Principle

Frequently, my athletes and patients are shocked when I give them their first exercise program under my guidance because it is so easy, even relaxing **since they are so used to being beat up by coaches and trainers**. Some are even more shocked when I tell them they will NOT have a structured workout at all, and that they will be using my **No Workout Workout** routine.

When they ask me why I have chosen to do this with them, I show them how high their scores were on my stress questionnaire. (Take a simplified version of my stress questionnaire from my book How to Eat, Move and Be Healthy. Match up your score with the chart shown in Table 1 to see how stressed you really are.)

Generally, people who score under 150 can handle the physical abuse that catabolizes tissue because they have the capacity for a healthy anabolic rebound. They get good results if they have adequate rest between training sessions.

The scores discussed in this article are calculated using the full questionnaire from How to Eat, Move, and Be Healthy, and not the questionnaire you have here:

For those who score between 150 and 259, I generally reduce the volume or frequency of training sessions (or both) to decrease the overall stress level on the body. This lowers the amount of stress hormones being produced and typically helps them sleep better and more effectively regulate their immune systems. Sometimes, athletes start making gains in their lifts and improve sports specific performance for the first time in months because they are finally getting adequate rest and recovery.

For those people scoring above 260, I frequently stop them from performing **any form** of catabolic exercise because, at this level of stress, they generally have a poor capacity to generate an anabolic response to an exercise stressor. These people are lacking life force energy or Chi. Should they continue and manage to add muscle in this state, they are usually doing it at the expense of vital organ or glandular systems. This leads to an important question: **Do you really want to trade your liver or adrenal glands for a bigger set of biceps?**

In these cases, I give Chi-cultivating exercises, such as meditative walking, Tai Chi, Qi-gong or suggest the person find a skilled Yoga instructor. I also prescribe the specific zone exercises from my book How to Eat, Move and Be Healthy that will cultivate Chi, feeding the regions of their body specific to their health conditions or mental/emotional concerns.



Table 1

Planning For The Stress-Challenged

Some people are so stressed out that even learning a new Tai Chi, Qi-gong or Yoga exercise feels like a burden to them. With these people, we go one step further in the application of the **No Workout Workout** concept. They are instructed to simply park their car at the far end of parking lots **and do their best to avoid escalators and elevators when entering buildings.**

This approach may seem too soft -- even mushy to those of you who are used to running your life like a sled dog -- but I have seen many people lose weight **that they previously could not.** I have also seen many heal **when they previously could not.** And, I have seen many overcome depression and relationship problems **where they previously could not!**

As my clients apply the foundational health principles in my book, their stress and other related health scores soon drop, making it clear their bodies are ready to receive more challenging exercise programs. When their scores drop into the green zone, it is evident they have regained their capacity for a full anabolic rebound, and we can now pursue exciting goals like making it through an entire ski season injury-free, lowering their 10K time, building the body they always wanted, or setting a personal best in an athletic event.

Working intelligently toward our goals and applying the "How to Eat, Move and Be Healthy" principles makes it obvious that when we apply the **No Workout Workout** concept to reduce stress, less can become more!

Those interested in learning more about reducing stress and the **No Workout Workout** are encouraged to begin with the following programs:

- How to Eat, Move and Be Healthy!
- You are What You Eat

} 1) Go To www.chekinstitute.com
2) Click on products
3) Click on books (on the right)

Paul Chek, Holistic Health Practitioner and certified Neuromuscular Therapist, is the founder of the C.H.E.K Institute in Vista, Calif. He is also a sought-after consultant to sporting organizations whose services have benefited numerous professional sports teams, athletes and individuals seeking optimal health worldwide.

Paul Chek's Stress Questionnaire

1. Do you eat more or less when stressed than when not stressed?
 More (10) Same/less (0)
2. Do you worry over job, income or money problems?
 Yes (10) No (0)
3. Are any of your relationships causing you stress?
 Yes (10) No (0)
4. Do you often feel anxious?
 Yes (5) No (0)
5. Do you often get upset when things go wrong?
 Yes (5) No (0)
6. Do you lash out at others?
 Yes (5) No (0)
7. Do you feel your sex drive is lower than normal for you?
 Yes (5) No (0)
8. Do you feel isolated or lonely?
 Yes (3) No (0)
9. Do you feel stressed due to lack of intimacy in one or more relationships?
 Yes (5) No (0)
10. Have you had reduced contact with friends (feeling antisocial) or an increase in contact because you feel you need to vent your frustrations or stresses to others?
 Yes (3) No (0)
11. Do you take any form of medication prescribed by a physician directly or indirectly related to stress in your life or for a psychological disorder?
 Yes (15) No (0)
12. Do you commonly lose more than two days of work a year due to illness?
 Yes (5) No (0)

Total Score: _____

I suggest the following CHEK Points to improve your health and vitality:

1. Before entertaining consumption of grain foods, always exclude all grains except corn, rice, buckwheat and millet for two weeks. If you feel a noticeable improvement in your health and well being, you are probably gluten-intolerant. When you start eating grain foods again after two weeks off, start slowly and eat only one grain food to minimize the possibility of a potentially uncomfortable reaction by the body; diarrhea and stomach pain is common among those that are gluten-intolerant!
2. Minimize all consumption of commercial and processed grains and grain-based products.
3. If you plan to eat any grains at all, restrict yourself to organic, unprocessed corn, rice, buckwheat or millet, rotating them on a four-day cycle. Only eat them after they have been presoaked for at least 12 hours to break down the phytic acid.
4. If you enjoy grain-based breakfast cereals, purchase only whole organic grains, soak or sprout and make your own breakfast cereals. There are a few companies that make reasonable boxed breakfast cereals, although my suggestion is to stay away from any processed, cooked grain products whatsoever!
5. If you enjoy bread, buy only sprouted whole-grain breads that contain no additives or preservatives. Use the above cereal guidelines to choose your breads and determine if you are gluten intolerant.
6. Avoid any conventionally prepared pasta. Purchase only organic rice pasta or gluten-free pasta if you are gluten-intolerant. Pasta is considered to be one of the foods most heavily laden with pesticide residues!
7. Apply the soaking principle to all seeds and nuts. Pour the water off the nuts and replace it each day. Keep refrigerated while storing once soaked.
8. Never eat more grain-based foods than ideal for your metabolic type with regard to how much carbohydrates you should be eating.

Paul Chek, Corrective, Holistic Exercise Kinesiologist and certified Neuromuscular Therapist, is the founder of the C.H.E.K Institute in Vista, Calif. A sought-after consultant to sporting organizations; his services have benefited numerous professional sports teams and athletes.

Paul has produced over 60 videos, 17 correspondence courses and is the author of several books, audio programs and articles. For more information on Paul's recent book "How To Eat, Move and Be Healthy!" or his popular "Equal But Not The Same" correspondence course, or for any of Paul Chek's other courses, videos and books call 1-800-552-8789 or 760-477-2620 or visit online at www.chekinstitute.com. Feel free to request a catalog of CHEK Institute products.