How to Get Back On The Exercise Track

June 01 2012 | By Dr. Jeff Spencer

We've all found ourselves at certain times in our lives having to put important activities down to address things requiring immediate attention. One of the most often first items chopped from schedules during those pressing times is exercise.

Exercise is an easy item to chop from the calendar in challenging times as its offers back a nice chunk of time, usually somewhere between 20 and 60 minutes, and easy to "get back to later" when life "calms down".

The challenge then becomes to "get back to it later" as when exercise is out of sight its out of mind and the longer its stayed away from it is often more and more difficult to get back to and many times never is until a health crisis demands it be returned to. But, the good news is, when it's time to get back to exercising it is easy to get back to and stick with following some very simple and effective strategies.

1. **Pick up slightly below where you left off** – It is vital when returning to exercise that you resist the temptation to start back where you discontinued. When exercise is discontinued the body's fitness gains from training slowly begin to diminish to a level equal to the where the body currently needs to perform at which is less than it was required to when exercising regularly.

When an exercise journal is maintained, it is much easier to know exactly where you discontinued and where to begin again than if no journal was kept and an estimation of where you left off is relied on to establish the starting point for resuming training. Once you've determined what your last exercise workout was, reduce that workout by 20% for two weeks to create a fitness base to resume exercising at again that can be done safely and effectively without exposing yourself injury or excess soreness.

 Don't Try To Catch Up – When resuming back to exercise there's the over-whelming tendency to try to catch up to your previous level too fast that most often results in burnout, excess soreness and needless injury. The best fitness gains will occur when you maintain a regular fitness program that balances the ideal exercise to rest ratio that leaves at least one day between similar workouts.

For example, if you train on Monday then train again on Wednesday allowing your body to recover on Tuesday. It is also acceptable periodically to allow two or three days between training sessions when your schedule only permits this. The idea is to be regular and not try to catch up. You will find that when you exercise regularly and allow for adequate body recovery between workouts you will be back to your peak fitness level where you previously left off much sooner than expected.

3. **Praise, Rather Than Beat Yourself Up** – An all too frequent personal response to discontinuing exercise and then resuming it is to beat one's self up for discontinuing exercise in the first place. If you've ever felt like this then welcome to the club as it is a deeply ingrained human nature reflex we all have that never serves us well, and can paralyze us from moving forward creating the erroneous belief that we don't have the self-control and capacity to move forward.

This, of course, is a complete myth, and the reality is that at any time we have the capacity to move forward and return to exercise by simply starting again close to where we left off and doing it from a position of love for self and praise for our commitment to get back to exercising, rather from a position of being self-defeating from self-judgment. Trust me, you can do this and often do it quickly when done from a position of self-respect and empathy.

4. **Show up on time** – The fastest way to get back to regular exercise is to show up and start exercising on time. Being on time is your single most important sign of respect for yourself and belief in self is an essential ingredient in gaining and maintaining fitness momentum.

To show up on time, have your exercise gear, clothes, equipment and water packed and ready in advance of exercising so you have everything you need to show up on time and get the workout completed on time and not risk being deflected and not finishing the workout from getting bogged down in trying to getting everything ready to workout.

Another important rule of thumb is to give yourself extra time to get to your workout as there's usually less time than we allow to start a workout and showing up late can reduce our belief in self that we can maintain a regular exercise schedule.

5. Write Training Times Down – Always write your exercise sessions into your calendar as when it's written its more likely to get done especially much more so than if we try to commit it to memory. Most have found that if they write their workout times in their calendars at least for the next two months running it provides the best level of commitment to maintain long-term fitness habits.

One month doesn't convey enough commitment as it looks like there's an "out" on the calendar and doesn't inspire confidence in the program where 3-months can be a bit too long and have a tinge of emotional dread and being locked in that can discourage people from the long-term commitment needed to create a life of lasting fitness gains.

6. Attend a regular class – A great way to re-enter the world of exercise is to attend an exercise class regularly. There are many advantages to taking an exercise class. Usually, there are people in the same boat of getting back to exercise and this creates a fellowship of group support to make that transition easier than if trying to go it alone.

The reality is everyone goes through peaks and valleys of enthusiasm for exercise and it's much easier to discontinue exercise when doing it in isolation than when belonging a group dynamic with an accountability component to it. Another part of human nature is that we'll often attend a class with others to support them than we will to support ourselves and that's why having accountability partners creates win-win for everyone.

Getting back to exercise isn't always easy for many reasons but the good news is that it can be done and with a proven structure propelling that re-enty it can be done much more easily with joy, confidence and results. The biggest challenge often is getting beyond the belief it can't be done since the wagon was jumped off of making it impossible to jump back onto again. That mind-myth has no basis in reality and when over-ridden with a sensible, workable plan, steady fitness gains can be achieved and maintained for a lifetime.

About the Author

Dr. Jeff Spencer, Olympian, ICA "Sports Chiropractor of the Year", and author is one of America's top builder of champions.

"Dr. Magic", as Dr. Spencer's often referred to, has been directly involved in 40+ World, Olympic, National and Tour de France championships. He has worked with NASCAR champion Bobby LaBonte, World Series MVP Troy Glaus, rock legend U2, and most known for helping Lance Armstrong win all 7 of his Tour de France victories on site. Dr. Spencer has also worked his "magic" with PGA, WTA, and Supercross champions, ultra-successful entrepreneurs and business standouts, NFL, MLB athletes, as well as Motocross and Formula 1 drivers.

Spencer received his master's in physical education and his undergraduate degree from University of Southern California and his doctor of chiropractic degree summa cum laude from Cleveland Chiropractic College in Los Angeles. He has taught post-graduate sports rehabilitation courses and frequently lectures on health, fitness, and wellness.

Dr. Spencer is the author of the acclaimed book, Turn It Up! How To Perform At Your Highest Level For A Lifetime and audio program "The Top 10 Tactics From The Champions Playbook".

"Jeff is part doctor, part guru, part medicine man... we believed Jeff could fix all of our problems... while he fixed us physically, he also fixed us mentally... If you judged the most important man on the team by the foot traffic in and out of his door, then it was Jeff. Without him, we know we'd never make it to Paris."

-Lance Armstrong, Every Second Counts

Simple Way to Get Fit with No Gym, No Trainer or No Equipment

May 18 2012 |

By Dr. Mercola

Here it is... a simple exercise that helps accelerate your move towards fitness. If you want to do one of the single best exercises to get your whole body in shape, you've come to the right place.

Ladies and gentlemen, I present to you... The Burpee!

Developed in the '30s by Dr. Royal H. Burpee -- a Renaissance man who was an author, a physical fitness fanatic and a psychologist, the Burpee was created by Dr. Burpee as part of his PhD at Columbia University. The Burpee has historically been used by the military to test recruits for strength and agility. In recent decades, the larger population caught onto the move's full-body calorie-blasting fitness benefits. The best part: Anyone can do it anywhere, at anytime.

Highly Effective Simple Exercise that Requires No Equipment, Gym, or Trainer

The reason why the Burpee is "the one" end-all, be-all exercise: It is a full body exercise used in strength training and as aerobic and anaerobic exercise.

- It pounds your entire body, working out your legs, arms, chest, back, abs, and glutes.
- It is a phenomenal strength trainer because you are pushing and lifting your own weight, and building serious muscle.
- The Burpee burns 50% more fat than conventional strength training. In other words, you can work out half the time and burn just as much fat. Burpees, like other strength training moves, also give your metabolism a boost. This is largely because it is a powerful anaerobic stimulus and falls into the Peak Fitness type of high intensity exercise training.
- The Burpee can be performed anywhere, and anytime for free.
- It is also a cardio-respiratory workout. If you do Burpees you can effectively raise your heart rate to target levels by doing a brief set of burpees.

How to Properly Perform a Burpee

It is performed in four steps, and was originally known as a "four-count Burpee":

- 1. Start in a standing position and drop into a squat position (as if you're sitting back into a chair) with your hands on the ground.
- 2. Bring your palms to the floor and extend your feet back in one quick motion to assume the front plank position.
- 3. Return to the squat position in one quick motion.
- 4. Return to an upright standing position.

Try it, and you'll see that it really packs a punch, targeting the legs, glutes, arms, and core, all at the same time. Do several in a row (if you can), and you'll ramp up your calorie burn, too.

How to Modify the Burpee if You Are Not Fit

If it's too challenging at first, here's a simple modification: Instead of going into plank position, do a Burpee by a wall. Squat down, stand up, and do a push-up against a wall. (This is especially important for anyone with knee or shoulder issues.)

How to Modify the Burpee if You Are Already Very Fit

Once you get the hang of a traditional Burpee, there are a few variations you can use to spice it up:

- 1. When you're in plank position, add a push-up to tone your arms, chest and shoulders. Don't forget to keep your core engaged throughout the move!
- 2. At the end of the exercise (when you move from squatting to standing), lift up on your toes for some added calf work. Or, if you're feeling really energetic, give it some propulsion and jump up for even more leg and glute action.
- 3. Following the push-up, try a side plank. In plank position, keeping your right hand on the floor, slowly lift the left hand up and out to your left side, rolling your torso out to the side so that your weight is on the right hand and your left hand is extended to the ceiling. This is a great challenge for your obliques, arms and shoulders.

Take The 10-Day Burpee Challenge!

Whether you can do 10 Burpees in a row or just one, start at a level that's comfortable for you, and begin to add an additional Burpees to your routine each day for 10 consecutive days. You'll be amazed at the full-body-sculpting, belly fat-melting results, and it takes less than five minutes a day!

You can also try using it in the Peak Fitness model by simply warming up with walking for three minutes. Then doing 30 seconds of Burpees, and walk for 90 seconds and repeat that 7 times. Then cool down for 3 to 6 minutes.

The Secret Burpee Subculture

You'll love the burpee, and hate it at the same time. You'll enjoy its benefits, and groan at the pain. All the while, you'll exult in the knowledge of participating in one of the most effective physical fitness moves known.

- To date, there are 19 variations of the Burpee on Wikipedia.com. Dozens of other variations live on YouTube and health blogs.
- The Burpee is finding its way back into popular fitness routines. Yoga has its own variation of the Burpee, as do several popular fitness coaches.
- The 100 Burpee challenge is a 100-day routine in which you do one Burpee on day one, two on day two, and so on, all the way up to 100 Burpees in 100 days. Can you say "ouch?"

• A guy named Paddy Doyle performed 1,840 Burpees in one hour. If you do more, you're eligible for a spot in The Guinness Book of World Records.

To sum up, the Burpee is your ultimate, all-inclusive, calorie-blasting, weight-smashing, muscle-building, body-sculpting wonder workout. It's clearly the single best exercise you can ever do.

Kathy Smith, president of Kathy Smith Lifestyles, has stood at the forefront of the fitness and health industries for more than 30 years with a collection of books, videos, audios and DVD's on walking, cardiovascular health, nutrition, strength training, yoga, Pilates, menopause, dance, and all-things-exercise. Her goal and personal mission is to inspire the best in others.

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The Muscle-Building Workout Hardly Anyone Uses

May 11 2012

By Dr. Mercola

Surely you realize just how important exercise is to get optimally healthy. I started exercising regularly about 45 years ago, and in my own journey, I've made many mistakes along the way.

By sharing them, hopefully you can avoid making the same mistakes I made.

One major mistake was not realizing the profound benefits of high intensity exercises.

Walk into a typical fitness center, and you will see the vast majority of people making this same mistake: They're only using the cardio equipment.

Worse yet, they're oftentimes reading a book or chatting while doing low intensity training. While this is certainly better than doing *nothing*, it's only providing a fraction of the benefits that are possible if you're using the cardio equipment effectively, and exercising more efficiently.

The way you use cardio equipment *properly* is by doing HIGH INTENSITY workouts. If you only have 30 minutes, you can easily complete a high intensity interval workout session.

Intensity is Key!

The key factor that makes interval training so effective is intensity. To reap maximum results, you need to work out at maximum intensity, with rest periods in between spurts. You can get an idea of what that looks like by watching my two videos below, in which I demonstrate Peak Fitness exercises using an elliptical machine and a recumbent bike.

While you can do Peak Fitness exercises on virtually any piece of cardio equipment, I don't recommend using a treadmill as it can be a bit dangerous due to the speeds involved. It takes much longer both to get up to maximum speed, and to slow down, and when you're tired and can't decrease the speed fast enough, you might get injured. On the bike or elliptical, you can instantly slow down, which makes it much safer. Although you could do these exercises outdoors as well, specifically sprinting, I would strongly advise against it without proper instruction on how to avoid injury. When I first started, I did sprints and I ended up pulling my hamstring. It took me nearly a year to fully recover. Sprinting is such an enormous force on hamstrings that unless they are very flexible, there is a great chance you can sprain them or other leg muscles.

Core Principles of High Intensity Interval Training

Here's a summary of what a typical peak fitness routine might look like:

- 1. Warm up for three minutes
- Exercise as hard and fast as you can for 30 seconds. You want to get your heart rate up to your calculated maximum heart rate. The most common formula for this is to subtract your age from 220. You should be gasping for breath and feel like you couldn't possibly go on another few seconds
- 3. Recover for 90 seconds, still pedaling, but at slower pace and decreased resistance
- 4. Repeat the high intensity exercise and recovery seven more times, for a total of eight repetitions

This takes exactly 20 minutes and requires just FOUR minutes of all out exercise. I typically cool down for another three to five minutes, and use a functional parameter of my heart rate. I like to get my heart rate down to around 120 before I stop, which gives me enough time to recover. I highly recommend using a heart rate monitor when doing these exercises as it is VERY difficult to accurately measure your heart rate without one.

How Often Should You Do High Intensity Exercises?

If this is the only type of exercise you are doing, you can probably do it three times a week and be fine. However, if you're also doing strength training, three times a week may be too much. Personally, after doing this for a few years, my rhythm is to do a high intensity Peak Fitness workout on the elliptical once a week and two weekly strength training workouts. I go up to three Peak Fitness workouts a week if I don't have access to weight equipment when I am traveling.

Recovery is another key factor of high intensity workouts. Many simply don't give themselves enough time to recover, which can be counterproductive. I made that mistake, which is why I cut back on my frequency. If you're competing, you can certainly increase the frequency, but if you're exercising to get healthy and live longer, then make sure to give yourself sufficient recovery time in between.

This brings up an interesting point... You can optimize your exercise in two ways:

- 1. To achieve extreme fitness for competition, OR
- 2. To promote longevity and perhaps fertility

Sad to say, this is an area where you simply cannot "have it all." You have to choose your end goal. For example, female professional athletes will oftentimes have difficulty getting pregnant, and this is because

they've altered their bodies to achieve maximum fitness (which includes low body fat and high muscle mass), forgoing optimal fertility in the process (women need body fat in order to produce female hormones).

To become fertile again, she must tone down her fitness routine and modify it so she can gain a higher percentage of body fat. Part of the problem is your body is very smart and will not allow you to get pregnant if it is not convinced there are enough calories present to support another life, and part of the way it does this is by monitoring your percentage of body fat.

You Can Super-Charge Your Weight Training Too!

I believe that nearly everyone should do some strength training, regardless of age. By aggressively working your muscle to fatigue, you're stimulating muscular adaptation that will improve the metabolic capability of your muscle and cause them to grow. There are many different ways you can go about lifting weights, but one version that seems to work well for many people is called Super-Slow Weight Training. By slowing everything down, you're actually turning it into a high intensity exercise. The super-slow movement allows your muscle, at the microscopic level, to access the maximum number of cross-bridges between the protein filaments that produce movement in the muscle.

I recommend using four or five basic compound movements for your exercise set. One sample set could be:

- 1. Pull-down (or alternatively chin-up)
- 2. Chest press
- 3. Compound row (A pulling motion in the horizontal plane)
- 4. Overhead press
- 5. Leg press or squat

These exercises can be done using either free weights or machines. The benefit of using a quality machine is that it will allow you to focus your mind on the effort, as opposed on the movement. Select a weight that is light enough so you can do at least eight repetitions, but heavy enough so you can't do more than 12. If you can squeeze out more than a dozen reps, then switch to a heavier weight. Here's a general summary of how to perform each exercise:

- 1. Begin by lifting the weight as slowly and gradually as you can. In the featured video, I demonstrate doing this with a four-second positive and a four-second negative, meaning it takes four seconds, or a slow count to four, to bring the weight up, and another four seconds to lower it. (When pushing, stop about 10 to 15 degrees before your limb is fully straightened; smoothly reverse direction)
- 2. Slowly lower the weight back down to the slow count of four
- Repeat until exhaustion, which should be around four to eight reps (once you reach exhaustion, don't try to heave or jerk the weight to get one last repetition in. Instead, just keep trying to produce the movement, even if it's not 'going' anywhere, for another five seconds or so. If you're using the appropriate amount of weight or resistance, you'll be able to perform four to eight repetitions)

4. Immediately switch to the next exercise for the next target muscle group, and repeat the first three steps

This workout will take no more than 12 or 15 minutes. For a demonstration, please see the featured video at the top of this article. Please note that I am NOT demonstrating classic Super-Slow training, but rather hybrid version that uses a count of four rather than the standard ten-count, which is *still* far slower than most people lift weights.

The Barbell Squat - King of Strength Training Exercises

Many consider the barbell squat to be the KING of strength training exercises. It will rapidly push you to anaerobic metabolism because you are using so many of your muscles. It can give you great abs, increase your vertical jump, your functional strength, and your sprint times. It can also increase the strength of nearly *all* the muscles in your body because of its powerful effects on stimulating growth hormone. Other health benefits boosted by the squat can include:

- Reduced body fat
- Better sleep
- Increased endorphin production (natural pain killers)
- Increased bone density

Make sure to widen your base by spreading your feet apart in a comfortable stance. Also, for safety's sake, stay inside the power rack frame. That way, if anything should go wrong and you fall or drop the weights, the bar will catch them. If you're doing a free-weight squat then I would strongly recommend using a trained spotter. This is less necessary on a Smith machine but still a good idea.

The downward portion of the lift always begins with your hips moving backward first. If you bend your knees first, you set yourself up for problems in the middle and end of the lift by causing you to have to adjust for your flexed knees... Moving your hips and buttocks to the rear will align your body to perform the squat perfectly. This can be difficult to do if you have decreased hip flexibility. I certainly did when I first started doing them and it took me a long time to change that. Ideally, have a trained professional guide you.

Tips and Guidelines for a Proper Leg Curl and Leg Extension

The leg curl, which is one of the exercises I demonstrate in the featured video, accentuates your hamstrings; the large muscles running down the backs of your legs, above your knees. They are an important muscle group that act as both a hip extensor and knee flexor. Keeping them strong can literally help keep you on your feet as you age. Coupled with strong quadriceps, having strong hamstrings can also help prevent hip and knee injuries that often lead to surgery.

The objective of the slow repetition leg curl is to perform 10 to 12 repetitions with one set to failure; meaning doing the exercise with the maximum weight you can handle in 10-12 repetitions, all in one set. The "failure" part of the exercise is the point at which you can no longer maintain good form and still lift the weights. Calculate your resistance to be 80 percent of your 10-rep max. When using the weight machine, take care to

not grip the handlebars too tightly. The grips are only there to help you maintain balance. Holding the grips loosely helps ensure the exercise targets your hamstrings, rather than "borrowing" strength from a strong grip.

Another leg exercise, the leg extension, focuses on the four muscles on your upper leg and thigh - the quadriceps.

These are the other set of muscles that work with your hamstrings. These are also important for maintaining good leg, hip, and knee strength. Make sure to keep your muscles engaged the entire time, with only a quick pause at the top and no rest at the bottom. You'll notice that your stomach muscles work with your legs on this exercise, but be careful not to allow your back to do the work - not only will it NOT build up the muscles you're targeting, but it could strain your back, causing problems that may need medical attention.

Guidelines for Five Common Upper Body Exercises

• **The Barbell Bench Press:** When bench pressing, it's important to maintain proper alignment. Remember to keep the bar over the center of your chest. Place your hands a comfortable distance apart - but not too far. Do not extend the bar over your face or toward your head, but keep above your chest. Again, remember to perform the exercise at a slow count of four seconds up and four seconds down. Resisting *on the way down* is what really helps build muscle strength.

The bench press will help you tone your pecs - the pectoralis major and minor - as well as your triceps and forearms. It also helps work your front shoulder muscles and the area from the bottom of your armpit to the middle of your ribcage, often referred to as the "boxer's muscle." As before, select a weight that will allow you to do 10-12 reps to failure, and remember to just barely touch the top of your chest - don't let the weights fall or rest there.

• Lat Pull-Down: When performing a lat pulldown with a supinated grip, you pull the weight down in front of your head with the palms of your hands facing your body. For good form, make sure to keep your shoulder blades retracted as you perform the extension. If you're doing it right, you can feel your torso tighten as you lower the weights to a count of four. Also avoid pressing your legs against the supports. Keeping your feet flat on the floor forces you to direct the work to the muscle groups you're isolating.

The lat pull-down will strengthen your latissimus-dorsi, teres-major, and pectoralis major muscles, and will help reshape your torso.

- **Shoulder Press**: The barbell shoulder press accentuates your anterior deltoid, the muscle that strengthens your shoulders, helps shape your biceps, and defines the area between your shoulder and pectoral muscles. For proper form, grasp the bar slighter wider than shoulder width. Overall, this exercise helps strengthen your arms and upper body.
- **Barbell Curl:** For this exercise, make sure you widen your base and bend your knees just a little bit. Also, engage your core, and maintain a good posture. Visually, you should be able to draw a near-straight line down the center of your body. If you can't manage that, opt for lower weights until you can. The only joint that should pivot is your elbow joint.

The barbell curl primarily works your biceps, but it also strengthens your forearms and shoulders. Keep in mind that women, unless they're bodybuilders, often don't want to build up

their biceps and triceps like men do. In that case, ladies may wish to level off, and not increase the weight anymore once your arms are at the shape you want them.

• **Tricep Press-Down/Pull-Down:** Grip the pull-bar with both hands about shoulder-width apart, and push/pull down. Make sure your neck is in a natural, neutral position, looking straight ahead as you isolate the target muscle. Again, if you can't lift and lower the weights without bending over, you're not getting the full benefit of the exercise. If that's the case, then reduce the amount of weight you use. Ladies: this is one way to get rid of those saggy bags under your arms! Build this muscle and you'll see a difference in no time.

Did you know that muscle weighs more than fat?

Some (usually women) will tend to panic a bit when they see the number on their scale go UP instead of down, but don't fret. These heavier muscles are tight and trim, and take up less space on your frame than an equal weight of fat does. So you're really slimming down, although you may be gaining a few pounds.

One Early Morning Mistake (and 7 Others) You Don't Want to Make April 20 2012 | By Dr. Mercola

Exercising is, hands-down, one of the best physical things you can do for your health.

Besides being beneficial for weight management, exercise can reduce your risk of heart disease, cancer, diabetes, and depression, and it can increase your energy levels, help you think clearer, and slow down the aging process.

Unfortunately, exercise is also one of the first things that tends to fall by the wayside. And, even with the best intentions and follow-through, progress can stall and intentions can go awry...

Shape magazine lists eight exercise mistakes that could be keeping you from getting the full benefit of your fitness program.

Interestingly enough, *one* specific type of exercise can help you circumvent or overcome most of these pitfalls, namely *high intensity interval training*—exercises in which you go "all out" for about 30 seconds, followed by a 90-second recovery interval.

(One session consists of eight such intervals.) Here, I'll reveal how...

Skimping on Sleep to Work Out Could Backfire

While I *do* recommend exercising first thing in the morning, I don't advise sacrificing sleep to do so. Fortunately, you don't have to! The research that has emerged over the past several years clearly indicates you don't *need* to exercise for long periods of time—as long as you're exercising correctly! As it turns out, the most effective and efficient way to work out is to 'remember' your ancestral roots, meaning, how humans *used to* move.

Both young children and animals clearly demonstrate the proper way to exercise: in short but aggressive or intense spurts with rest in between.

High intensity interval training using an elliptical machine or stationary bike can mimic this, and a growing body of research tells us the benefits from exercising this way are FAR greater than slow, long-distance forms of exercise. Interval training can dramatically improve your cardiovascular fitness and fat-burning capabilities in a fraction of the time--because you're utilizing your body as it was designed to be used.

A high intensity interval session only requires about 20 minutes or less, two or three times a week, opposed to an hour or more on the treadmill, several times a week. Most people can carve out 20 minutes without losing sleep over it. As mentioned in the featured article, getting enough sleep is an important aspect of health, and lack of sleep can hamper weight loss efforts and contribute to a wide range of health problems.

Concentrating on a Single Body Area is Counterproductive

As tempting as it may be to believe you have to do 100 crunches a day to achieve washboard abs, the truth is that such spot-specific focus tends to fail miserably. One of the main reasons for this is that in order to achieve muscle definition, regardless of what area of your body you're targeting, you need to lose fat, and spot-specific exercises like crunches are not an efficient way to boost fat loss...

High intensity exercises can make a dramatic difference here, because these exercises not only boost fat burning, they also automatically help create muscle definition all over your body, while simultaneously improving your aerobic fitness.

While I don't recommend doing just one form of exercise, IF that's all you have time for, then doing short but high intensity Peak Fitness exercises will give you the greatest all-around benefits, and this form of exercise differs from others in that it benefits *your entire body*. This is because high intensity exercises sequentially recruit all the different types of muscle fibers in your body, starting with the smaller motor units made up of slow-twitch fibers—which are primarily aerobic in metabolism, have a lot of endurance, and recover quickly—to the intermediate fibers; followed by the fast-twitch fibers.

The key to activating your fast-twitch muscle fibers is intensity, or speed.

Your fast-twitch fibers are largely glycolytic and store a lot of glucose. When these muscles are recruited, it creates the stimulus needed to grow muscle. At the same time, it enlarges the glucose storage reservoir in the muscle, which in turn enhances your insulin sensitivity. I've often stated that normalizing your insulin is one of the primary health benefits of exercise, and this is particularly true in the case of high-intensity exercise. Conventional aerobics does not do this as efficiently.

Activating your fast-twitch fibers also prompts your body to create human growth hormone (HGH), also known as "the fitness hormone," which plays an important role in slowing down the aging process.

Jumping on Every Fitness Fad that Comes Along May Hinder Your Progress

As mentioned by *Shape Magazine*, mixing up your workout is a great way to challenge your body and keep things interesting. But jumping on every exercise fad that comes along can be counterproductive. You need to stick with your program to give yourself the chance to reap the benefits from it.

That said, there's certainly nothing wrong with trying something new. After all, exercise is part and parcel of a healthy lifestyle, so it's a lifelong endeavor. There's plenty of time to explore. I'm a perfect example of this myself; after 30 years of being a dedicated long-distance runner, I stopped running over three years ago and switched to interval training instead once I realized just how much time I was wasting, and how many more health benefits I could reap from the switch.

Now I just do one high intensity Peak Fitness exercise on the elliptical once a week, along with two weekly strength training workouts. I go up to three Peak Fitness workouts a week if I don't have access to weight equipment when I am traveling. But I pay careful attention to my energy level during the workout and during the day. If I notice that I don't have the energy to finish the workout or the weight I can lift is decreasing and not increasing, I know it is time to take a break and get some more recovery time.

Over-Exercising Could Do More Harm than Good...

Switching from long-distance running to high intensity Peak Exercises has saved me a TON of time while *improving* my physical fitness. There's no doubt in my mind that most people are wasting loads of precious time in the gym, or running outside, as I once was... Some may even be doing more harm than good by exercising *too much*—either by exercising too intensely, and/or too frequently.

As discussed in the featured article, the "no pain, no gain" methodology can backfire, as can the practice of hitting the gym twice a day... Granted, over-exercising is far less common than not exercising enough. But it does happen, and tends to be counterproductive in most cases—at least if you're exercising for general health and longevity.

Part of the equation of creating optimal fitness is *recovery*. Besides intensity, recovery is a *key* factor of high intensity workouts. An equation to keep in mind is that as intensity increases, frequency can be diminished. In fact, you *need* to allow your body to fully recuperate in between sessions, so it's NOT recommended to do high intensity exercises more than three times a week. Both Phil Campbell and Dr. Doug McGuff have addressed this in previous interviews.

If you don't allow your body to fully recuperate and rebuild, your efforts will not pay off beneficial dividends.... I made that mistake, which is why I cut back on my frequency. If you're competing, you can certainly increase the frequency, but if you're exercising to get healthy and live longer, then make sure to give yourself sufficient recovery time in between sessions.

One of the keys here, as with any exercise program and lifestyle change, is to carefully listen to your body. With exercise you have to pay careful attention to recover if you tend to be someone who pushes yourself hard. If you only work out occasionally, this is a non-issue. But for those who are really committed and disciplined, it is very easy to over train, so please understand that recovery is every bit as important as training and if you work out too much you will not achieve the results you're seeking.

Over or Underestimating Yourself Could Nullify Your Efforts

As described in the featured article, many make the mistake of either pushing themselves too hard, or not hard enough. Or, when it comes to strength training; using weights that are too heavy or too light. In order to maximize your workout efforts, you need to strive for that 'Goldilocks' Zone' where you're pushing hard enough to challenge your

body at your current level of fitness. Needless to say, this will change over time, and that's the crux—a lot of people forget they need to *continuously up the ante* as their fitness improves.

This is especially important as it applies to high intensity exercises. To perform it correctly, you'll want to raise your heart rate to your anaerobic threshold, and to do that, you have to give it your all for those 20 to 30 second intervals. (As a general guideline, you can calculate your anaerobic threshold by subtracting your age from 220.) For a demonstration, please see the videos below.

Strive for Balance

Shape Magazine advises against sticking with one single workout routine, and I wholeheartedly agree. While high intensity interval exercises accomplish greater benefits in a fraction of the time compared to slow, endurance-type exercises like jogging, I do not recommend limiting yourself to Peak Exercises alone. If all you have is one, two, or three 20-minute blocks of time per week, then by all means, do what you can with what you've got. High intensity intervals will give you the biggest reward for your time investment. But ideally, to truly optimize your health, you'll want to strive for a varied and well-rounded fitness program that incorporates other types of exercise as well. Without variety, your body will quickly adapt.

I strongly recommend incorporating the following types of exercises to create a well-rounded fitness program suitable to your current level of fitness:

- 1. **Interval (Anaerobic) Training:** This is when you alternate short bursts of high-intensity exercise with gentle recovery periods.
- 2. **Strength Training:** Rounding out your exercise program with a 1-set strength training routine will ensure that you're really optimizing the possible health benefits of a regular exercise program. You can also "up" the intensity by slowing it down. For more information about using super slow weight training as a form of high intensity interval exercise, please see my interview with Dr. Doug McGuff.
- 3. **Core Exercises:** Your body has 29 core muscles located mostly in your back, abdomen and pelvis. This group of muscles provides the foundation for movement throughout your entire body, and strengthening them can help protect and support your back, make your spine and body less prone to injury and help you gain greater balance and stability.

You need enough repetitions to exhaust your muscles. The weight should be heavy enough that this can be done in fewer than 12 repetitions, yet light enough to do a minimum of four repetitions. It is also important NOT to exercise the same muscle groups every day. They need at least two days of rest to recover, repair and rebuild. Exercise programs like Pilates and yoga are also great for strengthening your core muscles, as are specific exercises you can learn from a personal trainer.

4. Stretching: My favorite type of stretching is active isolated stretches developed by Aaron Mattes. With Active Isolated Stretching or AIS, you hold each stretch for only two seconds, which works with your body's natural physiological makeup to improve circulation and increase the elasticity of muscle joints. This technique also allows your body to help repair itself and prepare for daily activity. You can also use devices like the Power Plate to help you stretch.

Lastly, I also agree with their recommendation to select your workout buddy with care. Because while it can serve as motivation to know someone is holding you accountable, if your workout buddy is more interested in talking or ends up being a frequent no-show, then they're not doing you any favors. You may be better off hiring a personal trainer. Not only will a trainer be able to teach you how to perform each exercise safely and effectively, knowing you have an actual appointment with a professional may be the motivation you need to get you into the gym on a regular basis.

• ⁱ Shape April 3, 2012

80-Year Olds With 40-Year Old Muscle Mass - What's Going On? December 16 2011 By Dr. Mercola

Increasing physical frailty as you age is commonly accepted as "a fact of life."

Until recently, most studies showed that after the age of 40, people typically lose eight percent or more of their muscle mass with each passing decade.

But newer research suggests that this is not a foregone conclusion.

One recent study of 40 competitive runners, cyclists, and swimmers, ranging in age from 40 to 81, found no evidence of deterioration -- the athletes in their 70s and 80s had almost as much thigh muscle mass as the athletes in their 40s.

Quoted in the New York Times, Dr. Vonda Wright, who oversaw the study, said: "We think these are very encouraging results...

They suggest strongly that people don't have to lose muscle mass and function as they grow older.

The changes that we've assumed were due to aging and therefore were unstoppable seem actually to be caused by inactivity.

And that can be changed."

Other recent studies have had similar results. For example, in an animal study from last year, elderly sedentary rats put on a running program developed new satellite cells after 13 weeks. These cells are specialized stem cells known to repair and build muscle tissue.

Lifelong Activity is Best, but it's Never Too Late to Start

Over the past several years, researchers have discovered that it is indeed possible to *restore* the ability of old human muscle to repair and rebuild itself. However, the need to keep aging muscles in shape has also been demonstrated, as long periods of atrophy are more challenging to overcome. These findings fall into the category of common sense, along the lines of "use it or lose it." And as you age, physical exercise becomes an ever more important aspect of optimal health and longevity.

The good news is that it's really never too late to start an exercise program, even if you've been inactive for a long time. Just keep in mind that older muscles do not respond as well to *sudden bouts* of exercise, so to take precautions and start off slow, to avoid injury.

Making Exercise Safe and Effective as You Age

Safety is always an important aspect of exercise, but becomes crucial if you're older and just embarking on a regimented exercise program. Unfortunately, many elderly forgo exercise altogether because of a fear of injury or pain, when, in fact, proper exercise will ultimately *reduce* your risk of injury as well as help to *improve* pain.

If you're elderly, it's advisable to get a workout buddy -- a personal trainer or someone who is experienced -to help guide you through your routine. Start off slowly and gradually increase intensity as you grow stronger, avoiding activities that aggravate or cause pain. Just keep in mind that while you need to use caution, you *do* need to exercise at a level that is challenging to your body.

Otherwise the true benefits will be forfeited.

Ideally your fitness program should be comprehensive, providing the necessary balance-training activities for stability while also improving your strength, flexibility, cardiovascular fitness and fat-burning capabilities with high-intensity "Sprint 8" exercises.

During 'Sprint 8 exercises,' you raise your heart rate up to your anaerobic threshold for 20 to 30 seconds, followed by a 90-second recovery period. You repeat this cycle for a total of eight repetitions. Sprint 8 exercises are particularly beneficial for aging bodies as this type of interval training triggers the natural production of human growth hormone (HGH), also known as "the fitness hormone." HGH plays an integral role in maintaining youthfulness and strength. (For an in-depth explanation of my Peak Fitness regimen, please review this past article.)

While anaerobic Sprint 8 exercises may seem too advanced for the elderly, don't let the intensity dissuade you! Rest assured you can perform Sprint 8 exercises at ANY age. The only difference is that the older you are the lower your maximum heart rate will be.

My Latest Findings on Optimal Exercise

I've been recommending doing Sprint 8 exercises three times a week, but after doing that myself for about a year, I gradually felt that it was too much for me. I cut down to once a week, which seemed to work out well. But after discussing it with Phil Campbell, he made a compelling argument to increase it back to three times a week. Getting growth hormone produced three times instead of just once a week can have profound health benefits, so I bumped it backed up.

I decided to make additional changes after I interviewed Dr. Doug McGuff, who is a strong proponent of Super Slow weight training. That interview will be published on January 6th, so for more information about Super Slow weight training, please open up that newsletter. Dr. McGuff believes that you only need *12 minutes* of Super Slow type strength training *once a week*.

I really enjoyed my interview with him as he helped me appreciate a nagging truth that I hadn't quite captured yet, and that is the crucial nature of recovery integrated into listening to your body.

The Importance of Recovery

I have known the importance of "Listen to Your Body," and always advocate this when it comes to selecting foods. But this also applies to exercise and recovery. The epiphany I had with Dr. McGuff is that I wasn't applying the 'listen to your body' principle with respect to my exercise program. When I grilled him on the parameters of how to know if you are recovered from your exercise, he said:

"You would have a restless energy and feel like you have to engage in some type of physical activity. You will spontaneously just want to work out."

Well that had not happened to me for some time, and I believe I was pushing myself too hard and had not allowed myself enough recovery time. This is probably not a problem for most people who exercise, as they are more than likely not pushing themselves *hard enough*, but when you go to extremes like in Peak Fitness, this is a serious risk you need to pay careful attention to.

So right now I'm in a massive experimentation phase, and I'm having fun playing around with my exercise program. I will likely be exercising the same length of time, just breaking it up differently, and listening to my body. I suspect that will be more ideal for me and I intend to report on my results so you can learn from it.

The lesson here is that life is an exciting journey, and you're never "too old." As you age, you do need to adjust however, and discover through trial and error what works best for you. Learn to listen to your body so it can guide you onto a path that will provide you with the most efficient and effective benefits.

For the Elderly, Exercise Can Quite Literally Save Your Life

As you get older your muscle and bone mass decrease and the senses that guide your balance -- vision, touch, proprioception -- may all start to deteriorate, and this can make you unsteady on your feet. Needless to say, bone fractures and brain injuries resulting from falls can be life threatening. Exercise is a *key* to maintaining your balance as you get older, and should really be viewed as a necessity -- like eating and sleeping -- as it can quite literally save your life.

By taking the time to do balance, strength and other exercises on a regular basis you can keep your sense of balance strong, and even restore what's already been lost.

In a study published last year, eight weeks of balance training reduced slips and improved the likelihood of recovery from slips among the elderly. Separate research, which noted that "altered balance is the greatest collaborator towards falls in the elderly," found balance training is effective in improving functional and static balance, mobility and falling frequency in elderly women with osteoporosis.

The ability to balance on one leg is also an important predictor of injury-causing falls, so if you know that you'd be shaky if you tried to stand on one foot, you're at an increased risk of being hurt in a fall and should start appropriate exercises immediately.

Yes, You Can Exercise at ANY Age

Earlier this fall I posted a couple of videos showing my mother's exercise routine. She didn't start working out until she was 74 and now, at the age of 77, she has gained significant improvements in strength, range of motion, balance, bone density and mental clarity.

Exercise Strengthens More than Muscle

Your muscles aren't the only benefactors of a comprehensive exercise program. While many are misled into thinking toxic drugs are the answer to combat decreasing bone density, the truth is that *weight-bearing exercise* is one of the most effective remedies against osteoporosis—another common problem related to aging.

Without question, osteoporosis drugs are likely to cause more long-term harm than benefit. Studies have actually linked bisphosphonate bone-strengthening drugs like Fosamax, Actonel, Boniva and Reclast to an *increased* risk of femur fractures. One of the latest and largest studies to date discovered that women who've been on bisphosphonates for more than five years have a nearly **three times higher risk** of these dangerous fractures...

Your bones are actually very porous and soft, and as you get older, your bones can easily become less dense and hence, more brittle—especially if you are inactive.

Resistance training can combat this effect because as you put more tension on your muscles it puts more pressure on your bones, which then respond by continuously creating fresh, new bone. In addition, muscle is heavier than fat, so as you build more muscle, and make the muscle that you already have stronger, you also put more **constant pressure** on your bones which automatically helps maintain bone strength.

The Many Health Benefits of Exercise

There's an overwhelming amount of evidence confirming that exercise is a key player in disease reduction, optimal mental, emotional and physical health, and longevity. After reviewing 40 papers published between 2006 and 2010, researchers found that exercise reduces the risk of about two dozen health conditions, ranging from cancer and heart disease to type 2 diabetes, stroke, dementia and depression. Exercise also slows down the rate of aging itself, providing perhaps the closest example of a real life fountain of youth as we will ever find.

Ideally, you will have made exercise a regular part of your life long before you reach your "golden" years ... but if you haven't, there's no better time to start than the present. Research has shown that regular exercise, even initiated late in life, offers profound health benefits. For instance:

- Even a small amount of exercise may protect the elderly from long-term memory loss and even help reverse some of the effects of aging.
- Moderate exercise among those aged 55-75 may cut the risk of developing metabolic syndrome, which increases heart disease and diabetes risk.
- Among those who started exercising at age 50 and continued for 10 years, the rate of premature death declined dramatically, similar to giving up smoking and mirroring the level as seen among people who had been working out their entire lives.

Remember, It's NEVER Too Late to Improve Your Health

It should be obvious by now that optimal health is dependent on an active lifestyle; eating fresh, whole foods, avoiding as many processed foods as possible, and addressing the stress in your life. Ignoring any of these basic tenets of health will eventually lead to a decline in health and any number of diseases.

Physical exercise is particularly important to maintain a high quality of life, as limited mobility can take a great toll... So *start moving*, and don't stop no matter what your age!

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Major Secret in Achieving Joint Pain Relief

January 06 2012 | By Dr. Mercola

Joint pain is incredibly common, impacting an estimated <u>30 percent of U.S. adults</u> and causing pain, swelling and stiffness that can range from mildly irritating to completely debilitating.

While knee pain is the most common joint pain reported, shoulder, finger and hip pain are also common, and may occur from numerous causes such as osteoarthritis, injury, repetitive movement or strain on the joint, and poor posture.

Aging is another factor, as with age, the flexible tissues in your body tend to lose their elasticity, leading to sagging and wrinkling of skin, stiff muscles and painful joints.

This process may be exacerbated by inactivity, which promotes muscle weakness, joint contractures, and loss of range of motion.

This, in turn, can lead to more pain and loss of function, and even less activity.

Many people are under the impression that exercise is somehow dangerous for their joints, and joint pain is a condition that requires rest to recover ... in reality, the opposite is true – exercise is essential for healthy joints and may even help to improve joint pain and function.

If You Have Joint Pain, Exercise is a Must

The notion that exercise is detrimental to your joints is a misconception, as there is <u>no evidence to support this</u> belief. Instead, the evidence points to exercise having a positive impact on joint tissues -- if you exercise sufficiently to lose weight, or maintain an ideal weight, you can in fact reduce your risk of developing joint pain due to osteoarthritis rather than increase your risk. Exercise can also improve bone density and joint function, which can help prevent and alleviate osteoarthritis (a major cause of joint pain) as you age.

As noted by Harvard Health Publications:

"... limiting your movements can weaken muscles, compounding joint trouble, and affect your posture, setting off a cascade of further problems. And while pain relievers and cold or hot packs may offer quick relief, fixes like these are merely temporary.

By contrast, the right set of exercises can be a long-lasting way to tame ankle, knee, hip, or shoulder pain. Practiced regularly, joint pain relief workouts might permit you to postpone—or even avoid—surgery on a problem joint that has been worsening for years by strengthening key supportive muscles and restoring flexibility."

Case in point, research shows that people with rheumatoid arthritis, which causes joint pain, stiffness and deformities, who did weight training for 24 weeks improved their function by up to 30 percent and their strength by 120 percent. Unfortunately, many with joint pain are missing out on these potential benefits. Research from Northwestern University Feinberg School of Medicine found that over 40 percent of men and 56 percent of

women with knee osteoarthritis were inactive, which means they did not engage in even one 10-minute period of moderate-to-vigorous activity all week.

Exercise Can Also Help Your Joints via Weight Loss

Arthritis rates are more than twice as high in obese people as those who are normal weight, because the extra weight puts more pressure on your joints, as well as increases inflammation in your body. This can not only lead to osteoarthritis, it can also make joint pain from any cause exponentially worse.

Exercise, along with a healthy diet, can help you to jumpstart weight loss if you're overweight, and this can lead to tremendous improvements in your joint pain. Harvard Health Publications states:

"Each pound you lose reduces knee pressure in every step you take. One study found that the *risk of developing osteoarthritis dropped 50%* with each 11-pound weight loss among younger obese women. If older men lost enough weight to shift from an obese classification to just overweight — that is, from a body mass index (BMI) of 30 or higher down to one that fell between 25 and 29.9 — the researchers estimated knee osteoarthritis would decrease by a fifth. For older women, that shift would cut knee osteoarthritis by a third."

Are There Special Considerations for Exercising With Joint Pain?

There are some factors to consider, particularly if your pain worsens with movement, as you do not want to strain a significantly unstable joint. Pain during movement is one of the most common and debilitating symptoms of osteoarthritis, and typically this is the result of your bones starting to come into contact with each other as cartilage and synovial fluid is reduced.

If you find that you're in pain for longer than one hour after your exercise session, you should slow down or choose another form of exercise. Assistive devices are also helpful to decrease the pressure on affected joints during your workout. You may also want to work with a physical therapist or qualified personal trainer who can develop a safe range of activities for you.

Your program should include a range of activities, just as I recommend for any exerciser. Weight training, high-intensity cardio, stretching and core work can all be integrated into your routine.

My most highly recommended form of exercise is Peak Fitness, and this program can be used by virtually everyone. However, if you've already developed osteoarthritis in your knee, you'll want to incorporate exercises that strengthen the quadriceps muscle at the front of your thigh. And, rather than running or other high-impact exercise, you may be better off with non-weight-bearing exercises like swimming and bicycling.

Natural Tips for Pain Relief and Cartilage Loss

Cartilage loss in your knees, one of the hallmarks of osteoarthritis, is associated with low levels of vitamin D. So if you're struggling with joint pain due to osteoarthritis, get your vitamin D levels tested, then optimize them using safe sun exposure or indoor tanning on a safe tanning bed. If neither of these options are available, supplementation with vitamin D3 can be considered.

To find out the details, watch my free one-hour vitamin D lecture.

In addition, when exposed to sunshine your skin produces two types of sulfur: cholesterol sulfate, and vitamin D3 sulfate. Sulfur plays a vital role in the structure and biological activity of both proteins and enzymes. If you don't have sufficient amounts of sulfur in your body this deficiency can cascade into a number of health problems, including impacting your joints and connective tissues.

In addition to making sure you're getting high amounts of sulfur-rich foods in your diet, such as high-quality (organic and/or grass-fed/pastured) beef and poultry, Dr. Stephanie Seneff, a senior scientist at MIT, recommends soaking your body in magnesium sulfate (Epsom salt) baths to compensate and counteract sulfur deficiency. She uses about 1/4 cup in a tub of water, twice a week. It's particularly useful if you have joint problems or arthritis.

As for supplements, methylsulfonylmethane, commonly known by its acronym, MSM, is also an option. MSM is an organic form of sulfur and a potent antioxidant, naturally found in many plants.

For dealing with joint pain, I suggest you avoid anti-inflammatory drugs like non-steroidal anti-inflammatories (NSAIDs) and analgesics, like Tylenol, which are often recommended to osteoarthritis patients. Chronic use of these types of medications is associated with significant, and very serious side effects such as kidney and/or liver damage.

Safer, and very effective, options to help relieve joint pain include:

• **Eggshell membrane:** The eggshell membrane is the unique protective barrier between the egg white and the mineralized eggshell. The membrane contains elastin, a protein that supports cartilage health, and collagen, a fibrous protein that supports cartilage and connective tissue strength and elasticity.

It also contains transforming growth factor-b, a protein that supports tissue rejuvenation, along with other amino acids and structural components that support the stability and flexibility of your joints by providing them with the building blocks needed to build cartilage.

• **Hyaluronic acid (HA):** Hyaluronic acid is a key component of your cartilage, responsible for moving nutrients into your cells and moving waste out. One of its most important biological functions is the retention of water... second only to providing nutrients and removing waste from cells that lack a direct blood supply, such as cartilage cells.

Unfortunately, the process of normal aging reduces the amount of HA synthesized by your body. Oral hyaluronic acid supplementation may effectively help most people cushion their joints after just 2 to 4 months.

- **Boswellia:** Also known as boswellin or "Indian frankincense," this Indian herb is one treatment I've found to be particularly useful against arthritic inflammation and associated pain. With sustained use, boswellia may help maintain steady blood flow to your joints, supporting your joint tissues' ability to boost flexibility and strength.
- **Turmeric / curcumin:** A study in the Journal of Alternative and Complementary Medicine found that taking turmeric extracts each day for six weeks was just as effective as ibuprofen for relieving knee osteoarthritis pain. This is most likely related to the anti-inflammatory effects of curcumin -- the pigment that gives the turmeric spice its yellow-orange color.
- Animal-based omega-3 fats: These are excellent for arthritis because omega-3s are well known to help reduce inflammation. Look for a high-quality, animal-based source such as krill oil.

• Astaxanthin: An anti-inflammatory antioxidant that affects a wide range of inflammation mediators, but in a gentler, less concentrated manner and without the negative side effects associated with steroidal and non-steroidal anti-inflammatory drugs. And it works for a high percentage of people. In one study, more than 80 percent of arthritis sufferers improved with astaxanthin.

A Final Point about Glucosamine and Chondroitin

You've probably heard that glucosamine and chondroitin (two animal products marketed as food supplements) can help relieve symptoms of osteoarthritis such as joint pain. However, the results from studies evaluating these supplements have been mixed, and many do not appear to be getting any significant relief from either glucosamine or chondroitin.

Further, while generally considered to be free of side effects, some people do experience gastrointestinal upset from it. Chondroitin molecules are large, making it difficult for your body to digest, which could be what causes problems for some people.

Also, only a small fraction of the glucosamine you take is actually utilized by your body. In the case of pills and capsules, the studies demonstrate that only about 15-20% is absorbed. The steps outlined above, however, should help to significantly slow down any further deterioration or loss of motion in your joints, along with help to alleviate pain.

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Top 10 Reasons to Strength Train

November

By Kathy Smith

Strength training is an integral part of a well-rounded exercise program, and is recommended for all ages, including kids and seniors.

Many still make the mistake of equating weight training with "bulking up."

Please understand that strength training is not just about "looking good."

It's also an important part of maintaining a healthy weight, strengthening your bones, and improving your body's posture, range of motion and functionality..

But that's just the beginning ... below are 10 more reasons why strength training should be a regular part of your workout routine.

• 10 Reasons to Add Strength Training to Your Workouts

- 10. Last time you tried to open a jar of olives you gave up and settled for a box of crackers. Why?
- You're losing it, baby!
- When it comes to muscle mass, we all experience a scary little process I call "The Great Decline."
- Every decade we lose muscle mass, and as we age the percentage of loss just keeps accelerating. By age 60, the average person will have lost one-third of his/her muscle mass.
- The good news: you can reverse it with resistance training. There's no age limit on your ability to add muscle and stop The Great Decline.
- 9. The phrase "Sitting AROUND the house" has more than one meaning -- and you'd like to avoid one of them.
- If you're reading this article, chances are you're interested in maintaining or losing weight. Too many people try to drop inches with diet alone, or by walking endlessly on the treadmill. My DVD 2-pack title says it all: *Lift Weights to Lose Weight*.
- Here's the bottom line: a pound of muscle burns 35 to 50 calories a day, just by sitting there on your body. A pound of fat? It burns about 3 to 5 calories a day.
- 8. Your idea of "getting dairy in your diet for calcium" is a pint of Ben & Jerry's ... so it's time to bone up.
- In your 30's, bone mass generally reaches its maximum level of growth. Then, in your 40's, it's another decline: your bone mass starts gradually decreasing. Once again, dumbbells save the day, as strength training maintains or even increases bone mass as you age.
- 7. Last time you slipped in the shower, you almost reenacted the "I've fallen and I can't get up" commercial.
- Poor balance and lack of muscular strength can result in falls, leading to fractures, broken bones, and worse. When performed properly, strengthening exercises increase flexibility and balance -- so you can stay on your toes.
- 6. Heart disease is sooooo 2007.

- Heart disease risk is lower when your body is lean. The American Heart Association recommends strength training as a way to reduce risk of heart disease -- it helps you lose visceral fat, the most dangerous type of fat when it comes to cardiovascular health.
- 5. For you, the idea of offering a piggy-back ride to a child is as horrifying as the latest *Saw* sequel.
- Got back pain or posture issues? The best non-surgical alternative for remedying back problems is strength training. A strong core supports your lower back and protects you from injury, and strong back muscles contribute to good posture.
- The bonus: good posture naturally makes your abdomen look flatter.
- 4. Bladder-control issues bring back painful schoolyard memories.
- Muscular agility is proven to help prevent incontinence. Moving on.
- 3. Psssst ... There are wild rumors going around that better sex can be ENJOYABLE. But you didn't hear it from me. Shhhh ...
- Resistance training is a must when it comes to reshaping your body, targeting "trouble spots," and transforming your figure into a younger, fitter, and, yes, sexier you. Not only does it help you improve your state of mind and ensure that you look terrific in a bathing suit ... but building muscle actually improves sexual function. (Before you run away from the computer to pick up your dumbbells, hang tight. We're almost finished here.)
- 2. Lifting a bag of groceries doesn't have to be the greatest achievement of your day. Let's aim a little higher with our goals, shall we?
- Nothing trains your body to perform functional movement for everyday living (bending, twisting, lifting, and reaching) like strength training. My *Lift Weights to Lose Weight* 2-pack gives you the best of both worlds: a fat-burning, muscle-toning workout for beginners and seasoned pros, with an added "twist" of core-strengthening exercises that improve your body's balance and functional abilities.
- 1. I said so!
- OK, all jokes aside ... Don't start your resistance training routine just because I told you to. Do it because you need to start building muscle now -- for all the reasons I just mentioned. Do it because muscle is about better coordination, agility and balance. Do it because muscle is about staying active and empowering yourself to enjoy life on a fuller level, from the boardroom to the bedroom.
- Do it because muscle revolutionizes your metabolism, transforms your body from the inside out, and is your best bet for reversing the aging process. In short, do it because muscle is about all the things you associate with youth -- and the clock is ticking for each and every one of us.



About the Author

- Kathy has stood at the forefront of the fitness and health industries for more than thirty years with a collection of books, videos, audios and DVD's on walking, cardiovascular health, nutrition, strength training, yoga, Pilates, menopause, dance, and all-things-exercise.
- As President of Kathy Smith Lifestyles, she has sold over \$500 million in lifestyle products and fitness equipment. In addition to her DVD library, Kathy is an accomplished author, with bestselling titles including "Feed Muscle Shrink Fat Diet" and "Moving Through Menopause". She has also

contributed her expertise on health and wellness to countless media outlets, including the LA Times, USA Today, The Today Show, Oprah, The View, Larry King Live, and many more. Smith recently launched Ageless with Kathy Smith, a new age-fighting DVD workout line with award-winning producer Acacia. The first workout, Staying Strong, was released in May 2011, with Total Body Turnaround coming out nationwide in November 2011.

- Kathy has teamed up with Pivotal 5, the industry trendsetter in hand held fitness, to successfully launch two lines of products. In 2009, Kathy Smith partnered with Rejuvenation Prevention + Rehabilitation™ to create a line of seven products targeting the "Actively Ageless". These products pioneered the category of fitness over forty targeting key areas of interest including toning and firming to balance and mobility. Each item comes complete with DVD featuring Kathy Smith's uniquely designed workouts targeting total body fitness and overall wellness. In 2010, Smith helped develop the Kathy Smith Healthy Living brand exclusively for Ross Dress for Less® stores. This exclusive brand promotes the active living across all fitness levels with the Healthy Living System to guide customers to the correct equipment based on their fitness goals.
- Kathy can be reached at KathySmith.com.

50-60% of People Put Their Life at Risk by Avoiding This. Do You? October 21 2011 By Dr. Mercola

A report summarizing data from the 2009 National Health Interview Survey conducted by the Centers for Disease Control and Prevention provides national estimates for a broad range of health measures for the U.S. population.

Estimates were calculated for selected chronic conditions, selected mental health characteristics, functional limitations, health status, health care access, and health behaviors.

One set of data looked at physical leisure-time activity. The survey showed that:

- 33 percent of adults were considered "inactive"
- 35 percent of adults engaged in leisure-time physical activity on a regular basis
- More than half of adults over the age of 18 never engaged in any vigorous leisure-time physical activity lasting 10 minutes or more per week
- 28 percent of adults engage in periods of vigorous leisure-time physical activity lasting more than 10 minutes or more, three or more times per week
- Men engaged in leisure-time physical activity on a regular basis more often than women.

According to the report:

"Regarding vigorous leisure-time physical activity, 50 percent of men never engaged in periods of vigorous leisure-time physical activity lasting 10 minutes or more per week compared with 60 percent of women. Thirty-one percent of men engaged in such activities three or more times per week compared with 25 percent of women."

The Importance of Remaining Physically Active

The fact that more than half of all American adults NEVER engage in any type of physical exercise at all is troubling because such profound lack of exercise can have severe health repercussions. The reason why women are less active than men may be because men in general tend to be more involved with group sports. Women also tend to carry a heavier burden running the household and caring for children, often working as well, which leaves less time for leisure activities.

Whatever your reasons, regardless of your sex, a growing body of research clearly shows that "exercise deficiency" threatens your overall health and mental well-being, and shortens your lifespan.

For example:

• In one 2010 study, published by the American Cancer Society, women who spent six hours a day sitting down increased their risk of death by 37 percent compared to those who spent less than three hours a day sitting down.

- According to a 2009 study in *Medicine and Science in Sports and Exercise*, the more time you spend sitting down, the greater your risk of dying from all causes.
- Less physical activity leaves you more prone to depression because you have lower levels of endorphins or feel-good hormones. Numerous studies have demonstrated that exercise may in fact the one of the most powerful strategies for depression, out-performing anti-depressants.
- A study featured in *Clinical Cardiology* showed that morbidly obese individuals those with body mass indexes between 40 and 49.9 spent on average just over 23 hours and 50 min per day either sleeping or engaged in sedentary activity, and took less than 2,500 steps daily, which is far below the recommended 10,000 steps for healthy living. Needless to say, obesity has been linked to five of the top 10 diseases with the highest mortality rates: cancer, cardiovascular disease, diabetes, hypertension, and stroke.
- Obesity and physical inactivity makes your body less sensitive to the glucose-lowering effects
 of insulin. Insulin resistance leads to higher blood levels of insulin, which can increase your risk
 of at least 20 serious diseases and health conditions that are directly attributable to being overweight.
 As for overweight children, teens and young adults, it's important to realize that carrying excess
 weight early in life increases the number of years they're exposed to all the health risks
 associated with obesity.

The benefits of regular exercise are so numerous, summarizing them all would easily require an entire book or two, but below are a dozen examples. For more information about how exercise can help you prevent or treat the following conditions, please review the hyperlinked articles:

Boost your IQ and think better	Manage arthritis	Fight depression	Lose weight
Lower your blood pressure	Lower your risk of heart disease	Lower your risk of diabetes and reverse pre- diabetes	Reduce your risk of cancer and improve your chances of recovery
Fight off a cold	Cure insomnia	Build strong bones and relieve chronic knee pain	Slow down your aging process

Two Factors Influenced by Exercise Account for Many of its Health Benefits

While the biological influence of exercise cannot easily be summed up, I'd like to point out two factors that are strongly influenced by physical activity, which helps explain how the benefits of exercise can be so farreaching:

1. Exercise reduces your insulin levels and helps normalize your insulin receptor sensitivity, and this is the single most important physical factor responsible for decelerating and preventing nearly every chronic disease known to man

Exercise helps prevent telomere shortening, which drives cellular aging, making it a very
powerful anti-aging strategy. It does this by activating the enzyme telomerase, which stabilizes
telomeres, producing an anti-aging effect at the cellular level. Research indicates physically
active people have significantly less erosion of telomeres than even healthy, non-smoking, but
sedentary folks.

How to Overcome Resistance to Exercise

Probably the most common reason people give for not exercising is that they don't have enough time. I would ask you to start thinking about exercise as being every bit as important as eating, sleeping and breathing. This is precisely what I do and I can confidently assure you that I work my schedule around my exercise. I rarely let anything ever interfere with it. I seek to work out every day, but nearly always alternate hard workouts with easy ones like Pilates or Power Plate stretching. My hard workouts are once a week doing a Peak Fitness workout on the elliptical, and three strength training days.

Once you start viewing it as a necessity rather than a 'leisure activity,' you may finally discover that there's time for it after all. The trick to making time for exercise is to view it as a *non-negotiable* part of your day. You need to place a high priority on it and schedule your day around the exercise; not the other way around. Another way to look at it is to view exercise as a drug, and actually write out a prescription for it, based on factors such as:

- your current physical condition
- your fitness goals
- your health concerns
- activities you enjoy
- best time of day for you to workout

A great tool for creating your own exercise prescription is my Daily Exercise Table. If you are overweight or have other health concerns, your goal should be to do Sprint 8's up to three times per week and once you reach your ideal body weight cut back to one or two per week. Remember if you are doing these workouts properly, you should really never do it more than three times a week. Additionally you should add strength workouts to your regimen as the increased muscle mass will help reduce fat.

As for age, please don't use that as an excuse because no matter what your age, exercise can provide enormous benefits for your health. And it actually becomes increasingly important with age. Ditto for pregnant women and those with serious diseases like cancer. Within the last two years, health authorities have begun urging people in both of these categories to engage in regular exercise to promote a healthy pregnancy and successful recovery.

Getting Back Into the Exercise Groove

If you're just getting back into exercising, you'll need to work your way up slowly. Trying to do too much at once can lead to burnout and make you less likely to continue your program. To start, you might try walking interspersed with a period of fast walking to incorporate the Peak Fitness ideology. Then, as your body grows

more conditioned, you can increase to a higher intensity workout. A sound, well-rounded regimen will include the following types of exercises:

- High intensity interval exercises
- Conventional aerobics
- Strength training
- Core exercises like Pilates
- Stretching like Yoga or active isolated stretching

If you experience emotional resistance, you may want to try a few of the recommendations from the article Five Ways to Pick up the Exercise Habit Again. As you remove the emotional resistance that is keeping you from exercising, and plan regular workouts to fit into your schedule, you'll have an easier time sticking to your exercise routine. And the more you exercise -- and therefore the more benefits you experience -- the more addictive it becomes.

At that point, you won't need enormous levels of discipline. You'll simply feel so good, you won't want to stop and lose that feeling.

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The Key Most Arthritis Sufferers are Not Doing Enough of

September 01 2011

It is known that being physically active is one of best ways people with arthritis can improve their health. However, a new study shows that more than half of women and 40 percent of men with arthritis are mostly sedentary.

Researchers asked more than 1000 people with radiographic knee osteoarthritis to wear an accelerometer in order to measure their physical activity for one week. Participants were deemed inactive if they failed to sustain a 10-minute period of moderate-to-vigorous activity over the entire week of wearing the accelerometer.

According to Science Daily:

"A substantial 40.1 percent of men and 56.5 percent of women studied were found to be inactive. While more than half of men engaged in significantly more moderate-to-vigorous activity than women, the majority of men who didn't fall into this category were spending their time in no to very light activity."

Dr. Mercola's Comments:

An estimated 27 million U.S. adults suffer from osteoarthritis, according to the latest statistics available from the U.S. Centers for Disease Control and Prevention. The most common form of arthritis, osteoarthritis is a degenerative joint disease that usually affects your distal joints, or the joints at the end of your fingers and toes, and is generally attributed to wear-and-tear on your joints due to lifestyle, diet and aging.

Contrary to popular belief, if you have osteoarthritis exercise is absolutely crucial to your well-being. Unfortunately, many people with joint pain shun exercise, and a new study found that the number of exercisers with osteoarthritis is even lower than was thought.

If You Have Osteoarthritis, Buck the Trend of Being Inactive

A new study from Northwestern University Feinberg School of Medicine outfitted over 111 adults with knee osteoarthritis with an accelerometer to measure their activity for one week. Over 40 percent of men and 56 percent of women were deemed inactive, which means they did not engage in even one 10-minute period of moderate-to-vigorous activity all week. The recommended physical activity guidelines -- 150 minutes per week of moderate-intensity, low-impact activity -- were met by only 12.9 percent of men and 7.7 percent of women.

The lead researcher told Science Daily:

"The fact that so many people with arthritis are inactive should be a wake-up call to physicians."

Indeed, if physicians could instill the importance of exercise to their arthritis patients, many would benefit immensely.

How Does Exercise Benefit Osteoarthritis?

Most people have little appreciation for how powerful exercise can be in preserving bone density and joint function, which can help prevent and alleviate osteoarthritis as you age. The notion that exercise is detrimental to your joints is a misconception; there is no evidence to support this belief. It's simply a myth that you can 'wear down' your knees just from average levels of exercise and/or normal activity.

Instead, the evidence points to exercise having a positive impact on joint tissues -- if you exercise sufficiently to lose weight, or maintain an ideal weight, you can in fact reduce your risk of developing osteoarthritis.

Arthritis rates are more than twice as high in obese people as those who are normal weight, because the extra weight puts more pressure on your joints. This can not only lead to osteoarthritis, it can also make the condition exponentially worse. You will want to jumpstart your weight loss by eating a healthier diet based on the principles of my nutrition plan, and then continue with appropriate exercise. (Making proper dietary choices is also one of the most profound ways to reduce inflammation, which is important if you have osteoarthritis,)

Whether you need to lose weight or not, however, exercise can help by reducing your joint pain and making it easier for you to perform daily tasks. This is important, as the pain of osteoarthritis has a tendency to lead to decreased activity, which in turn promotes muscle weakness, joint contractures, and loss of range of motion. This, in turn, can lead to more pain and loss of function, and even *less* activity.

Exercise can help you to break free from this devastating cycle.

How to Exercise Safely With Osteoarthritis

Your program should include a range of activities, just as I recommend for any exerciser. Weight training, high-intensity cardio, stretching and core work can all be integrated into your routine. My most highly recommended form of exercise is Peak Fitness, and this program can be used by virtually everyone. However, if you've already developed osteoarthritis in your knee, you'll want to incorporate exercises that strengthen the quadriceps muscle at the front of your thigh. And, rather than running or other high-impact exercise, you may be better off with non-weight-bearing exercises like swimming and bicycling.

People with arthritis must be careful to avoid activities that aggravate joint pain. You should avoid any exercise that strains a significantly unstable joint.

If you find that you're in pain for longer than one hour after your exercise session, you should slow down or choose another form of exercise. Assistive devices are also helpful to decrease the pressure on affected joints during your workout. You may also want to work with a physical therapist or qualified personal trainer who can develop a safe range of activities for you.

What Can You do for Pain?

Pain during movement is one of the most common and debilitating symptoms of osteoarthritis. Typically this is a result of your bones starting to come into contact with each other as cartilage and synovial fluid is reduced. If you don't take action it can become progressively worse until you are unable to carry out your normal daily activities.

You've probably heard that glucosamine and chondroitin (two animal products marketed as food supplements) can help relieve symptoms of osteoarthritis. However, the results from studies evaluating these supplements have been mixed, and many do not appear to be getting any significant relief from either glucosamine or chondroitin.

Further, while generally considered to be free of side effects, some people do experience gastrointestinal upset from it. Chondroitin molecules are large, making it difficult for your body to digest, which could be what causes problems for some people. It's also not clear, even after many studies, whether glucosamine affects blood sugar levels. In my opinion, people with diabetes or hypoglycemia should be cautious about taking glucosamine, and should carefully monitor their blood sugar levels if taking it.

Also, only a small fraction of the glucosamine you take is actually utilized by your body. In the case of pills and capsules, the studies demonstrate that only about 15-20% is absorbed.

As such, there do appear to be much better options for osteoarthritis pain, namely:

• **Eggshell membrane:** The eggshell membrane is the unique protective barrier between the egg white and the mineralized eggshell. The membrane contains elastin, a protein that supports cartilage health, and collagen, a fibrous protein that supports cartilage and connective tissue strength and elasticity.

It also contains transforming growth factor-b - A protein that supports tissue rejuvenation, along with other amino acids and structural components that support the stability and flexibility of your joints by providing them with the building blocks needed to build cartilage.

 Hyaluronic acid (HA): Hyaluronic acid is a key component of your cartilage, responsible for moving nutrients into your cells and moving waste out. One of its most important biological functions is the retention of water... second only to providing nutrients and removing waste from cells that lack a direct blood supply, such as cartilage cells.

Unfortunately, the process of normal aging reduces the amount of HA synthesized by your body. Oral hyaluronic acid supplementation may effectively help most people cushion their joints after just 2 to 4 months.

- **Boswellia:** Also known as boswellin or "Indian frankincense," this Indian herb is one treatment I've found to be particularly useful against arthritic inflammation and associated pain. With sustained use, boswellia may help maintain steady blood flow to your joints, supporting your joint tissues' ability to boost flexibility and strength.
- **Turmeric / curcumin:** A study in the Journal of Alternative and Complementary Medicine found that taking turmeric extracts each day for six weeks was just as effective as ibuprofen for relieving knee osteoarthritis pain. This is most likely related to the anti-inflammatory effects of curcumin -- the pigment that gives the turmeric spice its yellow-orange color.
- Animal-based omega-3 fats: These are excellent for arthritis because omega-3s are well known to help reduce inflammation. Look for a high-quality, animal-based source such as krill oil.

I suggest you avoid anti-inflammatory drugs like non-steroidal anti-inflammatories (NSAIDs) and analgesics, like Tylenol, which are often recommended to osteoarthritis patients, as chronic use of these types of medications is associated with significant, and very serious, side effects such as kidney and/or liver damage.

One More Essential Tip if You Have Osteoarthritis ...

Low levels of vitamin D are associated with cartilage loss in your knees, and this is one of the hallmarks of osteoarthritis. The remedy, to make sure your vitamin D levels are optimized, is simple. It involves getting your blood levels tested, then optimizing them using safe sun exposure, indoor tanning on a safe tanning bed, supplementation with vitamin D3, or a combination of the above.

To find out the details, watch my free one-hour vitamin D lecture.

While there is no "cure" for osteoarthritis, by exercising, eating right, optimizing your vitamin D levels and seeking natural, restorative options for pain, you can help to significantly slow down any further deterioration or loss of motion in your joints.

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Exercises to Improve Your Balance Crucial as You Age

May 17 2011

Your balance doesn't stay steady throughout your life. Just like your muscles and bones, your steadiness can deteriorate if it is not maintained. However, balance training isn't part of most workouts.

As you get older, the senses involved with balance can start to dull -- vision and your ability to sense touch, temperature, pressure and proprioception (your sense of where your body is and how it moves.) However, your balance can be shored up, even in very old age.

According to the Los Angeles Times:

"A 2007 study ... looked at the effect of a yearlong balance training program on women with osteoporosis. By the end of the study, the women's functional and static balance improved, as did mobility. Falling frequency declined ... Balance training almost always involves targeting core muscles -- the ones surrounding the trunk and the back, such as the abdominals, obliques and latissimus dorsi."

Dr. Mercola's Comments:

You were probably not aware that falls are the leading cause of injury death among people aged 65 and older, as well as the most common cause of nonfatal injuries and hospital admissions for trauma, according to U.S. Centers for Disease Control and Prevention data. Even a fall from ground level, such as slipping off a curb, can lead to severe injury and death.

Further, falls are incredibly common and related death rates have increased sharply in the last decade. The CDC notes that one out of three adults age 65 and over falls each year, and falls accounted for over 2 million nonfatal injuries among older adults in 2009 alone.

Not only are falls responsible for most fractures and traumatic brain injuries among the elderly, but those who fall can also develop an intense fear of falling again, which leads them to limit their activities and in turn increases their risk of falling even more. So while it may seem like exercises to improve balance are optional as you get older, they should really be viewed as a necessity -- like eating and sleeping -- as they can quite literally save your life.

Balance Exercises are Incredibly Effective at Preventing Falls

As you get older your muscle and bone mass decrease and the senses that guide your balance -- vision, touch, proprioception -- may all start to deteriorate, and this can make you unsteady on your feet.

Fortunately, as with your mind and your muscles, losing your balance is not an inevitable part of aging; you can keep your sense of balance strong, and restore what's already been lost, simply by taking the time to do balance exercises on a regular basis.

One recent study found that eight weeks of balance training reduced slips and improved the likelihood of recovery from slips among the elderly. Separate research, which noted that "altered balance is the greatest collaborator towards falls in the elderly," found balance training is effective in improving functional and static balance, mobility and falling frequency in elderly women with osteoporosis.

The ability to balance on one leg is also an important predictor of injury-causing falls, so if you know that you'd be shaky if you tried to stand on one foot, you're at an increased risk of being hurt in a fall. Remember, though, that you don't want to wait until you're wobbly to start balance training. Ideally, by doing balance exercises throughout your life you'll *avoid* ever losing your sense of balance in the first place.

What Types of Exercise Improve Balance?

There are a plethora of balance-training exercises available and you can include a variety of them in your workouts. This includes:

- Bosu Balance Trainers (half-sphere balls with a flat surface on top)
- Power Plate
- Stability balls
- Pilates and yoga
- Tai Chi

Generally speaking, any exercise that works your core muscles will improve your balance, as these muscles, located in your back, abdomen and pelvis, are crucial to helping you maintain balance and stability.

Paul Chek, HHP, NMT also recommends performing movements that closely approximate your everyday activities and those movements that commonly result in falls. In this past article, he demonstrates several such exercises, including the touch-toe drill, bench squat and supine lateral ball roll.

An Exciting Balance Breakthrough: The Power Plate

I have some personal experience with people over 65 falling and injuring themselves. My mother has fallen twice now and fractured her pelvis, broke her shoulder and wrist in the last few years. So at the ripe age of 74 I finally convinced her to start an exercise program of weight training and the Power Plate. I am pleased to report that her subjective improvement in her sense of balance has shot through the roof.

That is largely because one of the most exciting balance-training options on the fitness front is the Power Plate, a whole body workout exercise machine that engages 95 percent of your muscle fibers.

This multi-directional vibration machine has a number of benefits for your health, beyond the cardiovascular and metabolic aspects commonly associated with exercise. For example, the vibrational action of the Power Plate can help improve the following:

Strength	Proprioception	Balance	
Flexibility	Circulation	Neurological processes	

The tri-directional movement promotes proprioception, which is just a medical term for sensing the relative position of neighboring parts of your body. Proprioception is an internal feedback mechanism crucial for balance, as your body constantly adjusts to uneven terrain as you walk.

The unique ability of the Power Plate to train and build your neurological system has huge implications for treating people with neurological problems—for example, Multiple Sclerosis (MS), peripheral neuropathy, and elderly individuals who are prone to falls because of instability.

If you have ever done any exercise training on an uneven surface, you'll have noticed that it's harder -- you were recruiting more muscle fibers and more energetic pathways. The same idea applies to the Power Plate.

As the video below shows, you can re-train motor patterns and re-establish communication within your body as the Power Plate balances muscle groups, resulting in profound improvements in your overall balance.

If you are thinking of purchasing a Power Plate, be aware that there are a variety of cheap clones on the market being sold under different names. Typically, such machines are manufactured using vibrating equipment that is notoriously poor with faulty electronics, cheap bearings and buttons, and shoddy welds that often fail.

I suggest at least evaluating the Power Plate before deciding on a model, as you could be making a significant mistake by purchasing something cheaper that won't give you the same benefits.

A Comprehensive Fitness Approach is Best

Balance training is important, but is not the only type of exercise you need to build an optimally fit body. Ideally your fitness program should be comprehensive, providing the necessary balance-training activities for stability while also improving your strength, flexibility and cardiovascular fitness and fat-burning capabilities with high-intensity "Sprint 8" exercises.

During the 'Sprint 8 exercises,' you raise your heart rate up to your anaerobic threshold for 20 to 30 seconds, followed by a 90-second recovery period. You repeat this cycle for a total of eight repetitions.

For an in-depth explanation of my Peak Fitness regimen, please review this past article, and for even more fitness tips that will keep you in optimal health no matter what your age, be sure to review Mercola Peak Fitness for a variety of important fitness videos and articles.

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