

CHAPTER 20

HOW DOES STRENGTH TRAINING WORK?

You need strength in order to enjoy a good life. By that I mean that strong muscles remove the obstacles, pain and distress that can come from being weak. Strength training stabilizes the joints in your body by building up the muscles that support your bones—in other words, it helps protect your skeleton from injuries. It increases bone density and helps fine motor co-ordination (such as holding a pen) and gross motor co-ordination (like kicking a soccer ball). You need strength for everyday things—carrying a suitcase, a bag of groceries or lifting your child. It is also one of the very best ways to lose weight and improve your posture.

Did you know?

Strength training will not make you look bulky (unless you actually set out to become a body builder). Sometimes women express some concern about strength training. They may see it as something men are more drawn to, or they fear that they will end up looking “too muscular.” “I don’t want to look like a female body builder,” they’ll say. Fair enough. It takes tremendous, sustained effort to develop muscles “like a body builder,” not to mention the dedications needed to achieve that level of leanness. By contrast, when you use strength training for firming your arms (for example), it will actually make you appear leaner, stronger...dare I say sexier?

The encouraging news is that no matter how old you are, the body responds positively to strength training. A short time ago I read an article in a national newspaper with the headline “Grandpa gets ripped.” It was about a 60 year old dentist who became a competitive all-natural bodybuilder. In 2007, the World Natural Sports Organization had 44 competitors over the age of 60!

Did you know?

From the age of 20, you will lose about five to seven pounds (two to three kilograms) of muscle every decade you don't exercise (assuming you had some strength to begin with). That means that your metabolism—the breakdown of food and its transformation into energy—becomes less efficient as you age. Your metabolism slows, meaning your body does not burn as much fat as it once did, simply because you have less muscle. The good news is that current research at Boston University backs up the notion that stronger muscles equal a better metabolism. If you strength train, you'll add lean muscle mass back on. This is good. You can turn it around!

The key to strength training is that all your major muscle groups in slow strength exercises. Why slow? Because you work the muscle better. Also, when you try to heave or throw a weight around quickly, you increase the potential for injury. If you exercise slowly and fully contract your muscle through the whole range of motion, you dramatically reduce any chance of injury. By not heaving the weight against gravity or cheating through those sticky spots, you use the muscle group you want to strengthen fully.

One of the easiest ways to do strength training is in a fitness club that has a wide variety of strength training equipment. Here's how:

1. **Circuit training.** How does circuit training work? Circuit training (a group of stations) means moving around using 6 – 12 different pieces of strength equipment. On each piece of equipment you will perform one set (8-12 repetitions) of the exercise. A good measure of whether you are choosing the right weight for you is that your muscles should tire after 12 repetitions. This is a really simple way to understand basic strength training techniques because it takes the guess work out of strength training. Each piece of equipment works a different group of muscles, and you can control the amount of weight—starting gradually and building as you progress. These machines have diagrams as well to show you

how to correctly position your body for the best results. Have a club professional demonstrate how to coordinate your breathing. Simply put: exhale as you lift a weight; inhale as you lower it.

1. You can choose free weights (as opposed to a piece of strength training equipment) for use at home or in a fitness club. Plates in standard weights such as 2.5, 5, 10 pounds and up are loaded on each end of the barbell depending on what level you choose for your workout. Do a squat with a barbell. If you do a squat or leg press, it involves all those muscle groups. When you do a chest press, if you do it slowly you involve your chest muscles, your biceps, triceps and shoulder muscles. You can work your whole chest in one exercise! Free weights function the same as weights attached to a pulley but give you the advantage of being able to work out anywhere.
2. It's a good idea to exercise the large muscle groups first, working toward the small muscle groups. Start with a leg extension machine. This will strengthen the front of your thighs, known as your quadriceps. For the back of your thighs, known as your hamstrings, you can use another machine to perform what is known as a hamstring curl. Then continue by following the strength machine circuit to strengthen all the rest of your body. If you haven't done strength training before, starting with these machines helps to ensure you have good form and are doing the exercises safely and effectively.
3. **Free weights.** You can choose free weights (as opposed to a piece of strength training equipment) for use at home or in a fitness club. Plates in standard weights such as 2.5, 5, 10 pounds (1, 2, and 4.5 kilograms) and up are uploaded on each end of the barbell, depending on what level you choose for your workout. Do a squat with a barbell for your leg strength. When you do a chest press, if you do it slowly, you involve your chest muscles, your biceps, triceps, and shoulder muscles. You can work your whole chest in one exercise! Free weights function

the same as weights attached to a pulley but give you the advantage of being able to work out anywhere and at any angle.

Strength training at home

I often get asked, “Is it possible to strength train at home? What if I can’t get to a club or if I prefer to do it privately, without equipment?” The answer is yes, you can definitely strength train at home. Keep in mind, though, that training at home may not yield results as fast or as efficiently as when you would do it at a fitness club, but if you’re dedicated and disciplined to do it at home, it does work!

Here are two excellent strength training exercises you can do anywhere—in your living room, your family room, your bedroom. Get started with these today:

1) Stand with your back to a chair. Cross your arms over your chest and squat down to where the seat of the chair is (without touching it). Then stand up. Do this ten times (one set of ten). Two days later, do a set of ten again. Remember – the stronger you are, the more slowly you will be able to do this exercise, so take your time. “Safe, slow and strong” is the motto I use for strength training. That’s not too hard, is it? It’s very do-able—and you’ve just worked most of your lower body!

2) A second simple strength training exercise is the on-your-knees pushup. Instead of having your whole body extended, as for the traditional pushup, you start on your knees. Make sure your wrists are directly under your shoulders, and contract your stomach muscles to keep your abdomen strong and stable. Start with a set of ten and do this every other day. As you grow stronger, do the pushups more slowly. When you begin to feel you’ve gained more endurance, stop using your knees and go into a full pushup stance for the set of ten. You’ve just worked the upper half of your body, and your core!

Just doing these two exercises will go a long way to making you stronger. Something this simple will get you started and help you experience the benefits of increased strength. Try it—you'll begin to feel a lot better!

Did you know?

Your *total* time of continuous exercise should be about 20 minutes, and continuous strength training exercise is also cardiovascular exercise. That means that strength training is also exercise that helps improve the efficiency of your heart and lungs.

DO THIS: Go Slow, Do Less, Get More. Instead of doing 20 push-ups, try 2-5 executed slowly. Spend one minute doing push-ups slowly, regardless of the number. Then wait for two days and try again.

AND DO THIS: Consider hiring a personal trainer to help you establish a strength training program for yourself. A personal trainer can not only advise you about every aspect of your strength routine, he or she is also there to encourage you, cheer you on, and motivate you. One really neat way to benefit from strength training and get some social activity going too is to do strength training in a small group. Get your friends together and share the cost of a personal trainer. This is both cost-effective and a really fun way to get strong!

