

Chapter 3

Testing Your Strength, Setting Goals, and Tracking Progress

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You need to put your overall fitness, including your strength, to the test from time to time. Strength tests are particularly important when you begin a weight-training program. You need to know your starting point so you can set realistic goals and design a workout program that reflects your current abilities. As you get stronger, periodic strength testing can be a great measure of your achievements and keep you motivated to train. Some people are simply more data oriented than others, so how often you track your progress varies from person to person. For some people, recording daily details are relevant; for others, keeping records of annual tests are sufficiently motivating.

In this chapter, you discover a variety of strength tests appropriate for beginners, a proven strategy for achieving your goals, and a way to track your progress in a workout diary. Just for fun — and for veteran lifters who want to see how they stack up against the nation's finest — we've included the physical fitness requirements for a handful of law enforcement agencies and branches of the armed forces.

Testing Your Strength and Endurance

When you start an exercise program, you need to test more than the strength of your muscles. It's also important to evaluate your cardiovascular fitness (on a stationary bike or treadmill, for example) as well as your flexibility. These additional evaluations provide you with a more complete picture of your fitness instead of only looking at your level of strength. Record the following information in your fitness journal before you begin weight training:

- ✓ Height
- ✓ Weight
- ✓ Resting heart rate
- ✓ Blood pressure
- ✓ Cholesterol levels
- ✓ Waist measurement
- ✓ Body composition
- ✓ Body mass index
- ✓ Blood glucose levels

All these factors give important metabolic indicators of your overall health. Recording the above information helps you track your progress and see proven, documented results, even when you may not be seeing your waistline decrease or biceps increase as quickly as you want. When you do a weight-training program consistently, you'll see improvement in three areas:

- ✓ Body composition
- ✓ Body mass index
- ✓ Blood pressure

All three of these improvements reflect overall in your health. Most fitness facilities offer fitness assessments for their members for a fee. Some clubs include these assessments as part of your introductory membership package.

Research studies tell us that being fit to lower your risk of disease and to improve your quality of life is more important than simply being thin. For example, in a landmark study conducted at the Cooper Institute of Research, people who were both fit and overweight had a lower risk of disease and greater longevity than people who were thin and inactive.

Because this book, *Weight Training For Dummies*, 3rd Edition, focuses on tests of *muscular* strength, consult a qualified medical professional or fitness

trainer, or read *Fitness For Dummies* (Wiley) for details about other fitness tests to make sure that you have a well-rounded fitness program.



The term *strength testing* is somewhat of a misnomer. Strictly speaking, your *strength* refers to the maximum amount of weight that you can lift one time — also called your *one-rep max*. For example, if you squeeze out only one shoulder press with 45 pounds, that's your one-rep max for that exercise. In general, it's not such a hot idea to go around testing your one-rep maxes, especially if you're a beginner. Some veterans like to go all out sometimes, but they typically test their one-rep max for just one or two exercises in a given workout. Pushing to the max places a lot of stress on your body parts and can cause extreme muscle soreness even in experienced weight lifters.



A safe alternative to testing all-out muscle strength is testing your *muscular endurance*; you use a lighter-than-max weight and perform as many repetitions as you can. Most health clubs choose to do this type of testing. You can safely test your muscular endurance at home, too.

Table 3-1 contains a list of exercises that you can use to test the muscular endurance of each muscle group. (Actually, you can use any exercise you want, but the exercises in Table 3-1 are some of our favorites.) We haven't included a machine option for abdominals because exercises performed on the floor are more effective. The results simply give you a reference point. Strength improves quickly after you begin lifting weights regularly.

We can't tell you how much weight to use for your strength tests because everyone's abilities are different, but here is a helpful guideline: For each exercise, choose a weight that you think you can lift at least six times. If the weight still feels exceptionally light after six repetitions, put it down and rest a couple of minutes. Then try a weight that's a few pounds heavier.

For exercises that use no weight — such as the abdominal crunch and the push-up — simply perform as many repetitions as you can.

<i>Body Part</i>	<i>Free Weight Option</i>	<i>Machine Option</i>
Butt and legs	Squat	Leg press
Front thigh	Quad press	Leg extension
Rear thigh	Kneeling leg curl	Lying leg curl
Calf	One-leg calf raise	Standing calf raise
Upper back	One-arm dumbbell row	Lat pulldown

(continued)

Table 3-1 (continued)

<i>Body Part</i>	<i>Free Weight Option</i>	<i>Machine Option</i>
Lower back	Back extension	Back extension on a bench
Chest	Push-up	Vertical chest press
Shoulders	Dumbbell shoulder press	Shoulder press
Biceps	Dumbbell biceps curl	Arm curl
Triceps	Bench dip	Triceps dip
Abdominals	Abdominal crunch	None

When you test your strength, create a chart that lists each body part that you need to test. Next to the body part, note what exercise you performed, how much weight you lifted, and how many reps you were able to perform. Be sure to date your chart. Create a file folder for the information, keep it on your computer, or record your stats right away in your workout log. Use the results to design a weight-training program that helps you reach your goals.

Comparing your upper-body strength

Knowing how you stack up against others who've taken similar fitness tests can motivate you to work hard. A commonly administered test for upper-body strength is the push-up test. Men do military push-ups. Women do modified push-ups. Do as many push-ups as you can until you can no longer do another one with good form. The best way to take the test is with a friend, family member, or training partner who counts your reps out loud for you. Record the date and number for your records. Check Tables 3-2 and 3-3 to see how your push-up capability measures up with others.

Table 3-2**Push-ups for Men**

<i>Age:</i>	<i>20-29</i>	<i>30-39</i>	<i>40-49</i>	<i>50-59</i>	<i>60+</i>
Excellent	55+	45+	40+	35+	30+
Good	45-54	35-44	30-39	25-34	20-29
Average	35-44	25-34	20-29	15-24	10-19
Fair	20-34	15-24	12-19	8-14	5-9
Low	0-19	0-14	0-11	0-7	0-4

<i>Age:</i>	<i>20-29</i>	<i>30-39</i>	<i>40-49</i>	<i>50-59</i>	<i>60+</i>
Excellent	49+	40+	35+	30+	20+
Good	34-48	25-39	20-34	15-29	5-19
Average	17-33	12-24	8-19	6-14	3-4
Fair	6-16	4-11	3-7	2-5	1-2
Low	0-5	0-3	0-2	0-1	0

Comparing your abdominal strength

The crunch test is another commonly used assessment that is easy to do at home with a friend, family member, or training partner. Lie on your back on your training mat with your knees bent and arms resting at your sides, palms down. Have your partner mark a horizontal line with masking tape on each side of your body at the end of your fingertips. Place a second piece of tape parallel to the first piece toward your feet — about 2½ inches down the mat.

To begin the test, align your fingertips with the first marking. Crunch upward and slide your fingers along the mat to the second line. Lower completely to the starting position. Continue to do as many reps as you can. Move rhythmically in a smooth, controlled manner. Avoid using momentum and bouncing your body up and down rapidly. Record the date and number of reps for your records. Check Tables 3-4 and 3-5 to compare how you did.

<i>Age:</i>	<i>Under 35</i>	<i>36-45</i>	<i>Over 45</i>
Excellent	60	50	40
Good	45	40	25
Marginal	30	25	15
Needs work	15	10	5

<i>Age:</i>	<i>Under 35</i>	<i>36-45</i>	<i>Over 45</i>
Excellent	50	40	30
Good	40	25	15
Marginal	25	15	10
Needs work	10	6	4

Goal-Setting for Success

A lot of people set goals. Many of them even set realistic ones. But too often, people don't fulfill their ambitions — for many reasons. Researchers have studied why this process is so difficult for people and identified strategies that ensure greater success.

Identifying why your goals are important

You're much more likely to stick to a plan of action if you remind yourself often why it's important to you. For example, if you're starting up a strength-training program because you have borderline osteoporosis, increasing your bone density and preventing fractures is a huge motivator, not to mention avoiding looking like a hunchback. You know your life will be better if you don't end up in the hospital with broken bones on a regular basis. Alternatively, you may be weight training because you want to tone up and have more energy to get through each day. The specific reasons need to be individual and relevant to your life.

Whatever inspires you is key to keeping you on track with your training. Remind yourself of all the benefits you want to enjoy as a result of continuing with your weight-training program. Post your goals (and what you gain from achieving them) on your refrigerator, desk, or computer terminal. Or post pictures of good role models of what you want to achieve. Studies show that the best way to keep you motivated is to remind yourself frequently of the benefits as well as the negative consequences if you don't stay on track with your plans.

Using S.M.A.R.T. goals

People who use a system of setting S.M.A.R.T. (see the following bulleted list for definitions) goals have a much better chance of success at achieving their

goals. This system consists of taking small, specific steps toward a particular goal and focuses on changing your habits gradually.

When you set your training goals, check to see if they meet the following criteria:

- ✔ **Specific:** If you're having a tough time with consistent workouts, set a specific goal that you want to achieve that isn't too extreme. For example, set a specific goal to go through your weight-training program each week.
- ✔ **Measurable:** A measurable goal is one that you can objectively determine whether or not you met the goal. For example, make a measurable goal be to train at least 2 times per week for at least 25 minutes per session.
- ✔ **Achievable:** If you've been having a hard time finding a spare hour to train, don't plan to do a one-hour workout. Instead, set a more achievable goal for your schedule such as two 25-minute workouts.
- ✔ **Reasonable:** If you're having a tough time training twice a week, don't set a goal to train three times a week. First, master finding time to train twice a week and build from there. If even two times a week is tough, start out with a goal of once a week and build from there. Remember, you don't have to achieve your fitness goals all in the first month.
- ✔ **Timed:** Give yourself a set time to meet your goal. For example, if you set the goal of training at least 2 times per week for a minimum of 25 minutes per session, decide that you want to achieve this over a two-month period. If two months seems too long to you, start with a goal of one-month.

Fifty percent of people typically drop out of a new exercise program within the first six weeks, according to research evidence. Studies also tell us that it takes about eight weeks of doing a new behavior to create a new habit. Know that after you've passed the first eight weeks of consistent training, you're well on your way to successfully achieving your goals and maintaining a lifetime of fitness.

Keep in mind that life happens. If you fall off track, don't waste precious time beating yourself up with negative thoughts. Simply assess what interfered with your regular training, benefit from the experience, and get right back into your program. As the ancient Chinese saying goes, "The journey of 10,000 miles begins with a single step." This wisdom is applicable to your training. Just keep putting one foot in front of the other and believe in yourself.

Getting the support that you need

If you find that you're having a hard time keeping up with your program on your own, consider working with a personal trainer or hiring a lifestyle coach

to support you. Chapter 7 provides you with good tips on how to select a personal trainer or group fitness instructor.

Find ways to get the support of friends, family members, co-workers, and training partners. Studies show that social support is the single most important factor for sticking to a workout program. Share your goals with people you're close to and who care about you. Beware of those who may try to sabotage your goals. Let people know how important your training is and why you want to succeed. Share what benefits you expect to achieve and show your appreciation to those around you who do help you to succeed.

Tracking Your Progress

You may find that recording your workout details increases your motivation and helps you keep up with your workout program. Try logging your workouts in a notebook or weight training diary to see if this method works for you.

Recording information in your log

Some people benefit so much from recording their weight routines (and cardiovascular workouts) that they jot down information daily. Other people find the paperwork annoying and prefer to keep a log for, say, one week every couple of months as a reality check. No matter how often you use your log, jotting down many or all the following details is a good idea:

- ✔ **Your goals:** At the start of each week, jot down specific workout goals such as, “Push extra hard on back and biceps,” or “complete eight push-ups.”
- ✔ **The name of each exercise:** We're talking specifics. Don't just write “chest”; write “incline chest fly” or “vertical chest press.” This way, you know whether you're getting enough variety. Plus, you're forced to know the name of each exercise. We know people who've worked out for years and still refer to the dumbbell shoulder press as “that one where you push the dumbbells up.”
- ✔ **Sets, reps, and weight:** Note how many repetitions you performed and how much weight you lifted for each set. Suppose that you did three sets of leg curls — first 12 reps with 30 pounds, and then 10 reps with 40 pounds, and then 7 reps with 50 pounds. You can note this by writing “3” in the set column, “12, 10, 7” in the reps column, and “30, 40, 50” in the weight column.
- ✔ **How you're feeling:** We're not asking you to pour out your emotions like a guest on *Oprah*. Just jot down a few words about whether you felt energetic, tired, motivated, and so on. Did you take it easy, or did you act as if you were in Basic Training?

- ✔ **Your cardio routine:** Record how much cardiovascular exercise you did — whether it was a half an hour walking on the treadmill at 4 miles per hour or 15 minutes on the stairclimber at level 6. Also, note whether you did your cardio workout before or after you lifted weights.
- ✔ **Your flexibility routine:** Record the amount of stretching time and how your stretches felt. If you're feeling ambitious, you can record the names of the stretches or come up with names for your standard stretching routines.

Analyzing your workout log

Your journal gives you positive reinforcement no matter how often you choose to record your information. Watching your progress over time also gives you a big boost. If two months ago you could barely eke out 10 repetitions with 30 pounds on the leg extension machine and now you can easily perform 10 reps with 50 pounds, you know you've accomplished something.

Not only does a diary keep you motivated, but also recording your workouts helps achieve better results. If you're dedicating plenty of time to your weight training but aren't getting stronger or more toned, your workout diary may offer clues as to why you're not seeing results. Scrutinize your diary and ask yourself the following questions:

- ✔ **Am I getting enough rest?** Maybe you've been lifting weights every other day, but your body actually needs two rest days between workouts. An extra day of rest may give you more oomph when you lift.
- ✔ **Am I working each muscle group hard enough?** Your log may indicate that you've been neglecting a particular muscle group. Maybe you're averaging only four sets per workout for your legs compared to six or seven sets for your other body parts. Perhaps that's the reason your leg strength seems to be lagging.
- ✔ **Am I getting enough variety in my workout?** When you flip through your diary, maybe you see the words *biceps curl* three times a week for the past three months, but you rarely see any other arm exercise. Maybe you've fallen into a rut. Add new exercises or vary the number of sets and repetitions you've been doing. Or mix up the order of your exercises.
- ✔ **Am I lifting enough weight?** Maybe you never write down the words "tough workout." Perhaps picking up the 10-pound dumbbells for your biceps curls has become such a habit that you forgot to notice that those 10-pounders now feel light.
- ✔ **Am I doing my cardiovascular exercise before my weights or after?** Maybe you've been stairclimbing for 30 minutes before your weight sessions — and, therefore, are pooped out before you even lift a single weight.

Daily Workout Log				
Day of the week			Date	
Goals				
Cardiovascular Training	Time			Distance
Strength Training	Weight	Sets	Reps	Notes
Stretching			Notes	

Being All That You Can Be

Arresting thugs, steering a submarine, and pulling people out of burning buildings may not be among your aspirations in life. However, you may get a kick out of knowing whether you're strong enough to be a Marine or a fire-fighter. The following sections include tables that show you the physical fitness requirements for a handful of academies.

U.S. Marines

Marines are looking for a few *strong* men and women. Even after you become a Marine, you must continue to take fitness tests periodically. Tables 3-6 and 3-7 outline the performance requirements for men and women in the Marines.

Activity	Ages 17-26	Ages 27-39	Ages 40-45
Minimum performance level			
Pull-ups	3	3	3
Sit-ups (one minute)	40	35	35
3-mile run	28 minutes	29 minutes	30 minutes
Superior scores			
Pull-ups	20	20	20
Sit-ups (one minute)	80	80	80
3-mile run	18 minutes or less	18 minutes or less	18 minutes or less

<i>Activity</i>	<i>Ages 17-26</i>	<i>Ages 27-39</i>	<i>Ages 40-45</i>
Minimum performance level			
*Flexed-arm hang	16 seconds	13 seconds	10 seconds
Sit-ups (one minute)	22	19	18
1.5-mile run	15 minutes	16.5 minutes	18 minutes
Superior scores			
Flexed-arm hang	70 seconds	70 seconds	70 seconds
Sit-ups	50	50	50
1.5-mile run	10 minutes or less	10 minutes or less	10 minutes or less

**During the flexed-arm hang, you must remain in uppermost chin-up position, with your arms bent. After your chin lowers underneath the bar, the test is finished.*

The United States Air Force

The United States Air Force (USAF) has a detailed training program that you can either send away for or download from the World Wide Web at www.usafa.af.mil. See Tables 3-8 and 3-9 for sample tests.

The following list describes the exercises in the USAF physical fitness tests:

- ✓ **Pull-ups:** Start from a full hang and grip the bar with your hands about shoulder-width apart. No rocking, kicking, or cheating allowed.
- ✓ **Sit-ups:** Do as many bent-knee sit-ups as you can do in two minutes.
- ✓ **Push-ups:** Perform military push-ups as described in Chapter 12.

<i>Exercise</i>	<i>Minimum</i>	<i>Average</i>
Pull-ups	4	10
Sit-ups (two minutes)	49	69
Push-ups (two minutes)	24	41
300-Yard Shuttle Run	*65 Sec	*60 Sec

**Maximum time limit*

Table 3-9 USAF Candidate Fitness Test Data for Women

<i>Exercise</i>	<i>Minimum</i>	<i>Average</i>
Pull-ups	1	2
Sit-ups (two minutes)	46	68
Push-ups (two minutes)	9	24
300-Yard Shuttle Run	*79 Sec	*69 Sec

**Maximum time limit*

The Seattle Fire Department

Here are the physical requirements that the last American heroes must meet to win the privilege of saving lives and hauling hundreds of pounds of equipment into burning buildings. These standards apply to both men and women. Applicants of the Seattle Fire Department must do the following:

- ✓ Complete a steep incline press (shoulder press about 30 degrees below vertical) with a 95-pound barbell. Arms must extend fully.
- ✓ Perform a biceps curl with an 85-pound barbell, arms fully extended and back and shoulders against the wall.
- ✓ Lift an 80-pound ladder mounted 5 feet high, carry the ladder 40 feet, and place it on a sawhorse.
- ✓ Hoist 80 pounds of equipment to the seventh floor of a building, either alternating hands or yanking with both hands at once.
- ✓ Run up seven flights of stairs with an 85-pound hose while wearing a 25-pound mask.

