

Physical Exercise

One of the most powerful and effective methods for reducing generalized anxiety and overcoming a predisposition to panic attacks is a program of regular, vigorous exercise. You have panic attacks when your body's natural fight-or-flight reaction—the sudden surge of adrenaline you experience in response to a realistic threat—becomes excessive or occurs out of context. Exercise is a natural outlet for your body when it is in the fight-or-flight mode of arousal. A majority of my clients who have undertaken a regular exercise program are less vulnerable to panic attacks and, if they do have them, find them to be less severe. Regular exercise also diminishes the tendency to experience anticipatory anxiety toward phobic situations, expediting recovery from all kinds of phobias, ranging from fear of public speaking to fear of being alone.

Regular exercise has a direct impact on several physiological factors that underlie anxiety. It brings about

- *Reduced skeletal muscle tension*, which is largely responsible for your feelings of being tense or “uptight”
- *More rapid metabolism of excess adrenaline and thyroxin* in the bloodstream, the presence of which tends to keep you in a state of arousal and vigilance
- *A discharge of pent-up frustration*, which can aggravate phobic or panic reactions

Some of the general physiological benefits of exercise include

- Enhanced oxygenation of the blood and brain, which increases alertness and concentration
- Stimulation of the production of *endorphins*, natural substances which resemble morphine both chemically and in their effects: endorphins increase your sense of well-being
- Lowered pH (increased acidity) of the blood, which increases your energy level
- Improved circulation
- Improved digestion and utilization of food
- Improved elimination (from skin, lungs, and bowels)
- Decreased cholesterol levels

- Decreased blood pressure
- Weight loss, as well as appetite suppression, in many cases
- Improved blood sugar regulation (in the case of hypoglycemia)

Several *psychological* benefits accompany these physical improvements, including

- Increased subjective feelings of well-being
- Reduced dependence on alcohol and drugs
- Reduced insomnia
- Improved concentration and memory
- Reduced depression
- Increased self-esteem
- Greater sense of control over anxiety

Symptoms of Being out of Shape

How do you know that you are out of shape and in need of exercise? Here are some common symptoms:

- Being out of breath after walking up a flight of stairs
- Long recovery time after walking up a flight of stairs
- Feeling exhausted after short periods of exertion
- Chronic muscle tension
- Poor muscle tone
- Obesity
- Muscles cramped and aching for days after participating in a sport
- General tiredness, lethargy, boredom

Your Fitness Level

The worksheet below can help you assess the extent of your fitness. Think about the most strenuous physical activity you practice in an *average week*. When you have completed the questions below, determine your fitness score and evaluate your fitness level.

INTENSITY	FREQUENCY	DURATION
How strenuous is your exercise?	How many times do you exercise per week?	How long do you exercise each time?
<i>Heavy</i> = 5 points (fast cycling, running, aerobic dancing)	3 or more times = 5 points	21 minutes to 1 hour = 5 points
<i>Moderate</i> = 3 points (jogging, cycling, very fast walking)	1 to 2 times = 2 points	11 to 20 minutes = 3 points
<i>Light</i> = 1 point (golf, strolling, most housework)	not at all = 0 points	10 minutes or less = 1 point
Add your score:	_____ + _____	+ _____ = Total _____

TOTAL SCORE	FITNESS LEVEL	RECOMMENDED ACTION
13 to 15	Very good	Congratulations! Maintain your present level of activity.
8 to 12	Average	You are moderately sedentary and should increase your level of activity.
7 or less	Poor	Begin planning an exercise program now!

An alternative way to assess your level of fitness is to measure your *resting pulse rate*, the average number of heartbeats per minute when you're at rest. As a rule of thumb, a resting pulse of eighty or above suggests that you could definitely improve your fitness. A resting pulse of seventy to eighty suggests that you *may* need to obtain more exercise. If you are in a fitness program and have an average resting pulse below seventy, you are likely to be in good shape. To measure your pulse, allow yourself to get relaxed, then take the number of pulse beats in twenty seconds and multiply by three.

Preparing for a Fitness Program?

If you've decided you would like to get more exercise, you need to ask yourself whether you are fully ready to do so. There are certain physical conditions that limit the amount and intensity of exercise you should undertake. If your answer to any of the questions below is yes, be sure to consult with your physician before beginning any exercise program. He or she may recommend a program of restricted or supervised exercise appropriate to your needs.

YES NO

- ___ ___ Has your physician ever said you have heart trouble?
- ___ ___ Do you frequently have pains in your heart or chest?
- ___ ___ Do you often feel faint or have spells of dizziness?
- ___ ___ Has your physician ever told you that you have a bone or joint problem (such as arthritis) that has been or might be aggravated by exercise?
- ___ ___ Has a physician ever said that your blood pressure was too high?
- ___ ___ Do you have diabetes?
- ___ ___ Are you over forty years old and unaccustomed to vigorous exercise?
- ___ ___ Is there a physical reason, not mentioned here, why you should not undertake an exercise program?

If you answered no to all of the above questions, you can be reasonably assured that you are ready to start an exercise program. Begin slowly and increase your activity gradually over a period of weeks. If you are over forty and unaccustomed to exercise, plan to see your doctor for a physical before undertaking an exercise program.

Some individuals are reluctant to take up exercise because the state of physiological arousal accompanying vigorous exercise reminds them too much of the symptoms of panic. If this applies to you, you might want to start out doing forty-five minutes of walking on a daily basis.

Or you can *very gradually* build up to a more vigorous level of exercise. You might try just two to three minutes of jogging or cycling and then gradually increase the duration of your daily exercise a minute at a time, remembering to stop every time you feel even the slightest association with panic (see the descriptions of step-by-step desensitization in chapters 3 and 7). It might also be helpful to have a support person exercise with you initially. If you feel phobic about exercise, a program of gradual exposure will help you to desensitize to it in the same way you would to any other phobia.

Choosing an Exercise Program

There are many types of exercise to choose from. Deciding what form of exercise to do depends upon your objectives. For reducing generalized anxiety and/or a proneness to panic, *aerobic exercise* such as running, brisk walking, cycling outdoors or on a stationary bike, swimming, or aerobic dancing is the most effective for many individuals. Aerobic exercise requires sustained activity of your larger muscles. It reduces skeletal muscle tension and increases *cardiovascular conditioning*—the capacity of your circulatory system to deliver oxygen to your tissues and cells with greater efficiency. Regular aerobic exercise will reduce stress and increase your stamina.

Beyond aerobic fitness, you may have other objectives in taking up exercise. If increased muscle *strength* is important, you may want to include weight lifting or isometric exercise in your program (if you have a heart condition or angina, you should probably *not* engage

in weight lifting or bodybuilding). If *socializing* is important, then racquetball, golf, or team sports, such as baseball, basketball, or volleyball, might be what you're looking for. Exercise that involves stretching, such as yoga, is ideal for developing muscular *flexibility*. If you want to *lose weight*, jogging or cycling is probably most effective. If *discharging aggression and frustration* is important, you might try competitive sports. Finally, if you just want to get outdoors, then hiking or gardening would be appropriate. Rigorous hiking (as done by the Sierra Club, for example) can increase both strength and endurance. For further information on the various benefits of different types of exercise, see Covert Bailey's book on the subject, *The New Fit or Fat*.

Many people find it helpful to *vary* the type of exercise they do. Popular combinations involve doing an aerobic type of exercise such as jogging or cycling three to four times a week and a socializing exercise (such as tennis) or a bodybuilding exercise twice a week. Maintaining a program with two distinct types of exercise prevents either one from becoming too boring. What follows are brief descriptions of some of the more common types of aerobic exercise. Each type has its advantages and possible drawbacks.

Running

For many years, running (or jogging) has been the most popular form of aerobic exercise, perhaps because of its convenience. The only equipment you need is running shoes, and in many cases you need only step out your door to begin. Running is one of the best forms of exercise for losing weight, because it burns calories quickly. Numerous studies have shown its benefits for depression, as it raises both endorphin and serotonin levels in the brain. As mentioned above, running decreases anxiety by metabolizing excess adrenaline and releasing skeletal muscle tension. A three-mile jog (approximately thirty minutes) four or five times per week can go a long way toward diminishing your vulnerability to anxiety. Work up to a pace of one mile every ten minutes.

The downside to running is that, over a period of time, it can increase your risk for injury. In particular, if you run on hard surfaces, the constant shock to your joints can lead to foot, knee, or back problems. You can minimize your risk of injury if you

- Get proper shoes—those which minimize shock to your joints.
- Run on soft surfaces—preferably grass, dirt, a track, or a hardened beach. Avoid concrete if possible; asphalt is okay if you have good shoes and don't run every day.
- Warm up to running before you begin. Try doing a minute or two of very slow jogging.
- Avoid jogging every day—alternate it with other forms of exercise.

If running outdoors is a problem because of weather, lack of a soft surface, smog, or traffic, you may want to invest in a treadmill. To make its use less boring, put it in front of your television or media player.

Swimming

Swimming is my personal favorite form of exercise. It's an especially good exercise because it uses so many different muscles throughout the body. Doctors usually recommend swimming to people with musculoskeletal problems, injuries, or arthritis because it minimizes shock to their joints. It does not promote weight loss to the same degree as running, but it will help firm up your body.

For aerobic-level conditioning, it's best to swim freestyle for twenty to thirty minutes, preferably four or five times per week. For moderate, relaxing exercise, breaststroke is an enjoyable alternative. As a rule, it's best to work out in a heated pool where the water temperature is 75 to 80 degrees Fahrenheit.

The major downside with swimming is that many pools are heavily chlorinated. This may be quite irritating to your eyes, skin, or hair—as well as the membranes in your upper respiratory passages. You can counter some of this by wearing goggles and/or nose plugs. If you're fortunate, you may be able to find a pool that uses hydrogen peroxide or bubbled-in ozone as a disinfectant. Either of these is preferable to chlorine.

Cycling

In recent years, cycling has become a very popular form of aerobic exercise. While having many of the same benefits as jogging, it's less shocking to your joints. To achieve aerobic conditioning, cycling needs to be done vigorously—at a rate of approximately fifteen miles per hour or more on a flat surface. When the weather is good, cycling can be quite enjoyable—especially if you have beautiful surroundings with little traffic or a designated bike trail. If weather precludes cycling, you need to use a stationary bike indoors.

If you want to take up outdoor cycling, you'll need to make an initial investment in a good bike. You may want to borrow someone else's bike until you feel ready to spend several hundred dollars. In purchasing a bike, I'd suggest avoiding racing bikes unless you decide you want to race. You'll probably find sitting upright when you cycle to be more enjoyable and less stressful than sitting hunched over. Make sure the bike you purchase is designed and sized correctly for your body—or it may cause you problems. A well-cushioned seat is a good investment.

When you undertake cycling, give yourself a few months to work up to a fifteen-miles-per-hour cruising speed—a mile every four minutes. One hour of cycling three to four times per week is sufficient. Be sure to wear a helmet and try to avoid riding at night.

Aerobics Classes

Most aerobics classes consist of warm-up stretches and aerobic exercises led by an instructor. These are usually done to music. Classes are generally offered by health clubs, with various levels for beginning, intermediate, and advanced participants. Since some of the exercises can be traumatic to your joints, try to find a "low-impact" aerobics class. The struc-

tured format of an aerobics class may be an excellent way to motivate you to exercise. If you are self-motivated and prefer to stay at home, there are many good aerobics videos available.

If you decide to do aerobic exercises, be sure to obtain good shoes that stabilize your feet, absorb shock, and minimize twisting. It's best to do these exercises on a wooden surface and to avoid carpets, if possible. About forty-five minutes to an hour of exercise (including warm-up) three to five times per week is sufficient.

Walking

Walking has advantages over all other forms of exercise. First, it does not require training—you already know how to do it. Second, it requires no equipment other than a pair of shoes and can be done virtually anywhere—even in a shopping mall, if necessary. The chance of injury is less than with any other type of exercise. Finally, it's the most natural exercise activity. All of us are inclined to walk. Up until society became sedentary, walking was a regular part of life.

Walking for relaxation and distraction is one thing; doing it for aerobic conditioning is another. To make walking aerobic, aim for doing it about one hour at a brisk enough pace to cover three miles. A twenty- or thirty-minute walk is generally not enough to obtain aerobic-level conditioning. If you make walking your regular form of exercise, do it four to five times per week, preferably outdoors. If you feel an hour of brisk walking is not enough of a workout, try adding hand weights or finding an area with hills.

To get the most benefit out of walking, good posture is important. If it feels natural to allow your arms to swing opposite to the stride of your legs, you'll be getting "cross-lateral conditioning," which helps to integrate the left and right hemispheres of your brain. Good walking shoes are also important. Look for padded insoles, a good arch, and firm support of the heel.

Once you can comfortably walk three or four miles without stopping, consider taking hiking trips—day or overnight—in county, state, or national parks. Hiking outdoors can revitalize your soul as much as it does your body.

Getting Started

If you haven't been exercising, it is important not to start off too fast or hard. Doing so often results in prematurely burning out on the idea of maintaining a regular exercise program. The following guidelines for getting started are recommended:

- Approach exercise gradually. Set limited goals at the outset, such as exerting only ten minutes (or to the point of being winded) every other day for the first week. Add five minutes to your workout time each successive week until you reach thirty minutes.
- Give yourself a one-month trial period. Make a commitment to stay with your program for one month, despite aches and pains, inertia, or other resistance to exercise. By the end of the first month, you may be starting to experience sufficient ben-

efits to make the exercise self-motivating. Be aware that achieving a high level of fitness after being out of shape takes three to four months.

- Keep a record of your daily exercise practice. Use the *Daily Record of Exercise* that follows to keep track of the date, time, duration, and type of exercise you engage in on a daily basis. (You may want to make copies of the *Daily Record* so you can track your exercise program beyond the first month.) If you're doing aerobic exercise, record your pulse immediately after completing your workout and enter it under the column labeled "Pulse Rate." Also be sure to rate your level of satisfaction, using a 1 to 10 scale, where 1 equals no satisfaction at all and 10 equals total satisfaction with your exercise experience. As you begin to get into shape, your satisfaction should increase. Finally, if you fail to exercise when you intended to, indicate your reason for not doing so. Later on it may be useful to reevaluate these reasons to see if they are truly valid or "mere excuses." (See the final section of this chapter for dealing with resistance to exercise.)
- *Expect* some initial discomfort. Aches and pains when starting out are normal if you've been out of shape. You can expect the discomfort to pass as you grow in strength and endurance.
- Try to focus on the *process* of exercise rather than the product. See if you can get into the inherently enjoyable aspects of the exercise itself. If jogging or cycling is what you like, it helps to have a scenic environment. Focusing on competition with others or yourself will tend to increase rather than reduce anxiety and stress.
- Reward yourself for maintaining a commitment to your exercise program. Give yourself dinner out, a weekend trip, or new athletic clothes or equipment in exchange for sticking to your program during the first weeks and months.
- *Warm up.* Just as your car needs to warm up before you begin driving, your body needs a gradual warm-up before engaging in vigorous exercise. This is especially important if you are over forty. Five minutes of calisthenics or stretching exercises will usually be sufficient.
- After vigorous exercise, it is important to give yourself a few minutes to cool down. Walking around for two or three minutes will help bring blood back from peripheral muscles to the rest of your body.
- Avoid exercising within ninety minutes of a meal, and don't eat until one hour after exercising.
- Avoid exercising when you feel ill or overstressed (try a deep relaxation technique instead).
- Stop exercising if you experience any sudden, unexplainable bodily symptoms.
- If you find yourself feeling bored with exercising solo, find a partner to go with you or a form of exercise that requires a partner.

Optimizing the Anxiety-Reducing Effects of Exercise

Exercise needs to be of sufficient regularity, intensity, and duration to have a significant impact on anxiety. The following standards can be viewed as goals to aim for:

- Ideally exercise should be *aerobic*.
- Optimal frequency is *four to five times* per week.
- Optimal duration is *twenty to thirty minutes* or more per session.
- Optimal intensity for aerobic exercise is a heart rate of $(220 - \text{your age}) \times 0.75$ for at least ten minutes.

The table below indicates aerobic pulse ranges for various ages:

Age	Pulse (Heart) Rate
20–29	145–164
30–39	138–156
40–49	130–148
50–59	122–140
60–69	116–132

- *Avoid exercising only once per week.* Engaging in infrequent spurts of exercise is stressful to your body and generally does more harm than good (walking is an exception).

Obstacles to Implementing an Exercise Program

If you have difficulty starting or maintaining an exercise program, ask yourself what excuses or rationalizations you are giving yourself. What are you saying to yourself that tends to make you procrastinate? Try making a record of your opportunities and excuses. Use the one below as a model.

A Couch Potato's Logbook

Janine is fifty pounds overweight. She wants to lose weight, but she also uses her weight as an excuse not to exercise. Here is a logbook of Janine's battle with her sedentary lifestyle.

*Opportunity to Exercise Not Taken**Reason I Didn't Exercise*

Friend invited me to go to her aerobics class.

I kept thinking how grotesque I'll look in a leotard. What if my competitiveness makes me work too hard and I have a heart attack?

Walk to the grocery store.

I'd have too much to carry home—and, anyway, it looked like rain.

Local chapter of the Sierra Club was advertising a bird walk.

I don't know the names of any of the birds. I don't have binoculars. I might get panicky if we have to climb up anywhere high.

How I'll Talk Myself Into It Next Time

I'll find some loose, comfortable clothes that won't show every bulge quite so much. I'll focus on pacing myself—if I start to feel too stressed, I won't feel 'self-conscious about slowing down or just standing and stretching for a while.

I'll spread out my shopping over more trips so that I have only one bag to carry each time. I can wear a daypack to free up my hands while I'm walking home. Now that I think of it, my fold-up umbrella fits inside my pack—and, anyway, it's easy enough to carry.

I guess people go on these things because they *don't* know the names of the birds: I'll be in good company. Even if I don't have binoculars, it will be good for me to get out in the air—and maybe we'll see some birds close up. I'll look into borrowing some binoculars. I'll ask my friend George along—he knows about my panic attacks and he'll be able to help me if I start feeling stressed out.

Common Excuses for Not Exercising

Below is a list of common excuses people make for avoiding exercise.

- "I don't have enough time."

What you are really saying is that you're not willing to make time. You aren't assigning enough importance to the increased fitness, well-being, and improved control over anxiety you could gain from exercise. The problem is not a matter of time but one of priorities.

- "I feel too tired to exercise."

One solution is to exercise before going to work—or on your lunch break—rather than at the end of the day. If this is simply impossible, don't give up. What many nonexercisers fail to realize is that moderate exercise can actually *overcome* fatigue. Many people exercise *in spite* of feeling tired and find that they feel rejuvenated and reenergized afterward. Things will grow easier once you get past the initial inertia of starting to exercise.

- "Exercise is boring—it's no fun."

Is it really true that *all* the activities listed earlier are boring to you? Have you tried out all of them? It may be that you need to find someone to exercise with in order to have more fun. Or perhaps you need to go back and forth between two different types of exercise to stimulate your interest. Exercise can begin to feel wonderful after a few months when it becomes inherently rewarding, even if it initially bored you. If you've considered jogging but think of it as too boring, I suggest that you read *Beyond Jogging—The Inner Space of Running*, by Mike Spino.

- "It's too inconvenient to go out somewhere to exercise."

This is really no problem, as there are several ways to obtain vigorous exercise in the comfort of your home. Twenty minutes per day on a stationary bicycle will give you a good workout. If this seems boring, try listening to a portable audio device with headphones or place your stationary bike in front of the TV set. Aerobic exercise at home is convenient and fun if you have a DVD player. There are many low-impact aerobics programs available on DVD. Other indoor activities include jumping on a rebounder, calisthenics, using a rowing machine, and/or using a universal gym with adjustable weights. There are also early morning exercise programs on TV. If you can't afford exercise equipment, just put on some wild music and dance for twenty minutes. In short, it is quite possible to maintain an adequate exercise program without leaving your home.

- "I'm afraid I'll have a panic attack."

Brisk walking every day for forty-five minutes is an excellent form of exercise that is very unlikely to produce symptoms you might associate with panic. If you would prefer doing something more vigorous, start off with a very short period of two or three minutes of exercise and gradually add a minute at a time. Anytime you start to feel uneasy, simply stop, wait until you fully recover, and then try completing your designated period of exercise for that day. The principles of graded exposure described in chapter 7 can be applied effectively to a phobia about exercise.

- "Exercise causes a buildup of lactic acid—doesn't that cause panic attacks?"

It is true that exercise increases the production of lactic acid, and that lactic acid can promote panic attacks in some people who are already prone to them. However, regular exercise also increases *oxygen turnover* in your body—that is, the capacity of your body to oxidize substances it doesn't need, including lactic acid. Any increase in lactic acid produced by exercise will be offset by your body's increased capacity to remove it. The net effect of regular exercise is an overall *reduction* in your body's tendency to accumulate lactic acid.

- “I’m over forty—and that’s too old to start exercising.”

When clients over forty tell me “it’s too late” to take up exercise, I remind them that many of the people chosen to be astronauts are in their forties. I also tell them about marathon runners who *began* running in their fifties and sixties after having not exercised at all. Unless your doctor gives you a clear medical reason for not exercising, age is never a valid excuse. With patience and persistence, it is possible to get into excellent physical shape at almost any age.

- “I’m too overweight and out of shape” or “I’m afraid I’ll have a heart attack if I stress my body by exercising vigorously.”

If you have physical reasons to worry about stressing your heart, be sure to design your exercise program with the help of your physician. Vigorous walking is a safe exercise for virtually everyone and is considered by some physicians to be the ideal exercise, as it rarely causes muscle or bone injuries. Swimming is also a safe bet if you’re out of shape or overweight. Be sensible and realistic in the exercise program you choose. The important thing is to be consistent and committed, whether your program involves walking for one hour every day or training for a marathon.

- “I tried exercise once and it didn’t work.”

The question to ask here is this: *why* didn’t it work? Did you start off too hard and fast? Did you get bored? Did you balk at the initial aches and pains? Did you feel lonely exercising by yourself? Perhaps it is time for you to give yourself another chance to discover all the physical and psychological benefits of a regular exercise program.

Regular exercise is an essential component of the total program for overcoming anxiety, panic, and phobias presented in this workbook. If you combine exercise with a program of regular deep relaxation, you are undoubtedly going to experience a substantial reduction in generalized anxiety and will very likely increase your resistance to panic attacks as well. Exercise and deep relaxation are the two methods *most* effective for altering a hereditary-biochemical predisposition to anxiety. The techniques described in the remaining chapters of this workbook depend for their effectiveness on your commitment to and mastery of deep relaxation and a program of regular exercise.

Summary of Things to Do

1. Evaluate your level of fitness, using the worksheet in the section “Your Fitness Level.”
2. Determine whether you are ready to begin a fitness program by answering the questions in the section “Are You Ready for a Fitness Program?”
3. Choose one or more types of exercise you would prefer to do. If you’re out of shape, begin with walking for periods of at least thirty minutes or with a more vigorous

form of exercise for ten to fifteen minutes. Increase the duration and intensity of your exercise gradually. Exercise at least four times per week.

4. Monitor your exercise program, using the *Daily Record of Exercise*, for at least one month.
5. Observe all the guidelines for maintaining a regular exercise program listed in the section "Getting Started." It's particularly important to give yourself time to warm up and cool down before and after engaging in vigorous exercise.
6. If you encounter resistance to exercise—or lose your motivation to keep exercising after the first week or so—reread the section "Obstacles to Implementing an Exercise Program." Try to identify what you're telling yourself about exercise that creates your resistance or lack of motivation. Work on countering your negative self-talk by giving yourself positive reasons to exercise the next time you have an opportunity.

Further Reading

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