



**How to measure your heart rate while exercising:** Wear a watch with a second hand. When you think you've reached your target heart rate, stop exercising hard (keep moving slowly) and immediately take your pulse by pressing gently on the artery in your neck with the flat part of your fingers. Count the number of beats in 6 seconds and add 0. That will tell you the number of heartbeats per minute. Then start exercising hard again.

heart exercising. To get the maximum benefit from aerobic exercise you want to speed your heart beat up to something called your target heart rate — the rate at which your heart is getting the maximum, beneficial exercise. Once it's there, you want to keep it there for 15 minutes. Raising your heart beat above the target rate can stress your heart. Exercising with your heart beat lower than the target rate reduces the benefits to you.

To calculate your target heart rate:

1. subtract your age from 220
2. multiply that number by .80

Example for a 16 year old:

$$220 - 16 = 204 \times .80 = 163$$

This means that for a 16 year old in average shape, the target heart rate is 163 beats per minute. To get the maximum benefit from arobics, this person should exercise until his or her pulse measures 163 beats per minute and then continue exercising for 15 minutes with the heart beating at that rate. Then he or she should walk and do cool-down stretches for five minutes until the heart returns to its normal, resting rate.

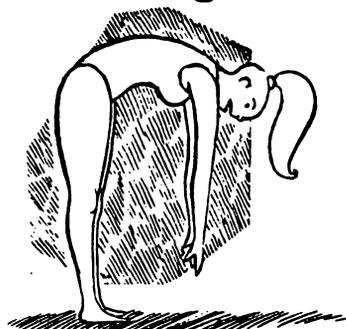
## INTERVAL TRAINING

Some sports researchers now believe that the best way to exercise your heart is with something called interval training. Instead of reaching your target heart rate and staying there for 15 minutes, they recommend exercising at your target rate for a minute and then slowing down for a minute, then going back up to your target rate for a minute, then slowing down for a minute. They feel this

up-and-down sequence is more natural to the heart than constant beating at the target rate. You can do whichever kind of aerobics you find more comfortable. In fact you can alternate between the two from day to day.

## WARM-UP AND COOL-DOWN STRETCHES

Do these stretches after warming-up and after exercising.



**HAMSTRING STRETCH:** Bend over and try to touch the floor. Hold for 30 seconds. Stand up and bend your knees for 30 seconds, then touch the floor for another 30 seconds.

**ACHILLES TENDON STRETCH:** Stand 3 or 4 feet from the wall with your palms on the wall. Keeping your body straight, bend your elbows and lean in toward the wall until you feel the muscles in the backs of your legs stretch. Hold for 30 seconds. Repeat.

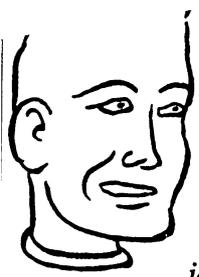


**THIGH STRETCH:** Stand on your left leg and rest your left hand on a wall for support. Bend your right leg behind you and hold your foot with your right hand. Press your foot toward your body until you feel the muscle in the front of your thigh stretch. Hold for 30 seconds, then repeat with the other leg.

**SIDE STRETCH:** Put your arms over your head and lean first to one side, then the other. Hold on each side for 10 - 15 seconds.



**I know aerobics is good for me. But I just can't do it because...**



**1. I don't have enough time. I get up at 6:00, I barely have time to shower and dress before I leave for school. Some days I don't even eat breakfast. Then I'm in school all day. When am I supposed to exercise — between 2nd and 3rd periods? Then after school I have band practice, or basketball, or yearbook, or a job. By the time I get home, it's time for dinner. Then I have to do homework. By that time I'm exhausted and it's time for bed. I barely have time to see my friends, never mind do an aerobics program.**

**Paul Sandoz, 17:** "I have a job after school so I didn't think I'd have time to do aerobics. But instead of taking the bus to my job, I've started running."

**Tanya Williams, 18:** "I try to run both weekend days, then I just have two school days to worry about. Then I try to run right before dinner."



**Sandra Collins, 16:** "If I leave the house ten minutes earlier in the morning I can do a fast 20-minute walk to the bus stop."

**Kimiko Tanaka, 15:** "It's easy! I just take an aerobics class at school!"



**2. I don't have the energy to exercise after everything else in the day.**

**Keesha Spawlding, 14:** "I can't run after school. I'm too tired! So I run early in the morning. Then by 8:00 it's all over!"

**Richard Martinez, 16:** "This sounds dumb, but even when I'm tired in the afternoon I look forward to exercising because I know I'll feel better afterward."



**Rebecca Soderstrom, 15:** "Even when I'm real tired, I forget about it once I start exercising. I just focus on getting through the 20 minutes, and then, once it's over, I feel great."

**3. I've tried before, but I just can't stay with it.**

**John Vanden Heuvel, 17:** "What helps me stick with it is that I run with a friend. On mornings when the last thing I

want to do is get out of bed and run, I know Steve's out there waiting for me..."

**Anita Switzer, 15:** "This is embarrassing, but what makes me exercise every day is that I'm addicted to Oprah Winfrey. I jump rope in front of the TV every day at 4:00."



**Paul Chan, 16:** "I finally figured out how to do it so it doesn't feel "extra." I do a real fast 20-minute bike ride home from my job every day."



## EXERCISE TIMETABLE

**5 minutes**

**warmup stretches**

**5 minutes**

**begin aerobic workout; take pulse after 5 minutes, it should be at target rate**

**15 minutes**

**aerobic workout with heart at target rate**

**5 minutes**

**cool-down exercises**

*4. I know it's good for me, but I just don't like it.*

**Jemal Williams, 16:** "I go to a basketball court near my house every day and play real hard for about an hour. It feels like I'm having fun, but it's a lot of exercise."

*5. I get enough exercise already.*

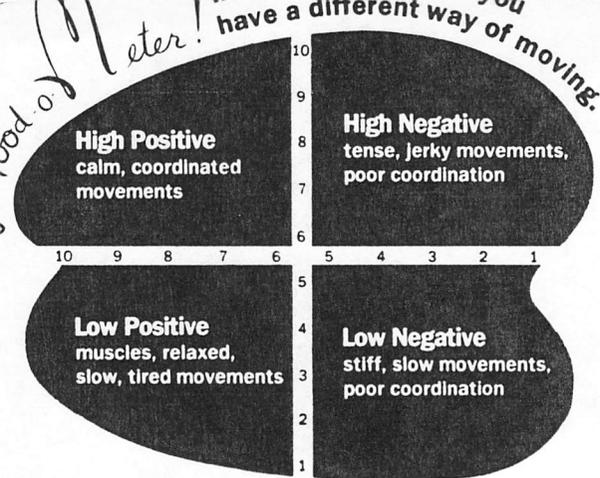
**Pete Delman, 17:** "I play a lot of sports and I'm in pretty good shape. But since I've been doing aerobics, I don't get out of breath and I can play longer."

**Maria Romero, 17:** "I waitress at night. It's hard work and I used to be tired in school every day. But then I started doing aerobics at school. Now I have more energy and I'm more awake in my classes."



**Jennie Westerheim, 16:** "Aerobics keeps my stress level down in a way other sports don't."





## WARNING!

**Do not expect to reach your target heart rate the first several weeks of your aerobics program.** Begin by exercising slowly, at a speed that is comfortable. Forget about “no pain-no gain.” Exercise should not hurt. You should be able to carry on a normal conversation while doing it. If you can’t, slow down! As you build strength

and stamina, gradually increase your speed. As you do, your heart rate will also pick up. After a few weeks you should be able to reach your target heart rate comfortably.

## CROSS-TRAINING

Exercise should be fun; otherwise you won’t want to do it. Many athletes keep their exercise programs fun by doing cross-training. They switch from one sport to another every day (or even within one exercise period) to keep themselves from getting bored.

You might try biking one day, running the next, swimming the third, and then going back to the beginning of the cycle. Or, if you exercise indoors, you might try running in place for ten minutes and then jumping rope for ten. You can pick your activities and your time slots. Just keep your heart near its target rate for 15 consecutive minutes and have fun.

## TIPS ON CREATING AN EXERCISE REGIME

1. Start slowly. Work gradually up to your target heart rate.
2. Don’t make it hurt. You should feel comfortable while you do it.
3. Listen to your body: if it’s sore or tired, take a day off. Or switch to a different type of exercise. Running can be hard on the knees, hips and ankles. If yours start to feel stiff or sore, switch to a low-impact form of exercise like swimming or brisk walking.

- ➔. Have fun! If exercising isn't fun, you won't do it. So find a way to enjoy it.
- ▶ Do it with a friend.
- ▶ Make it fit easily and naturally into your schedule so you don't feel crazed about making time for it.
- ▶ Do something you enjoy. Don't force yourself to run if you hate running. Swim, bike or walk briskly instead.
- ▶ Find things to like in the routine: enjoy being outside, enjoy the fact that it's break from your worries and homework; enjoy the fact that it only lasts for 20 minutes and then you get to feel virtuous for the rest of the day!

### **QUICK-FIX: THE SHORT TERM BENEFITS OF EXERCISE**

In addition to its long-term benefits, exercise provides some attractive short-term bennies. It's a great way to release tension when you're feeling angry, depressed, frustrated or nervous, and it provides a healthy shot of energy when you need to perform.

Imagine this:

*You're nervous. You have to tell a friend that he or she did something you didn't like. You're waiting for him or her to show up and you're practicing what you're going to say. At least you're trying to practice. The trouble is, each time you try to focus your mind goes blank. You wish you didn't have to go through with this.*

*You consider:*

- leaving before your friend arrives*
- pretending that nothing happened*
- hiring someone to do it for you while you watch from across the street.*

*You're late. You have to be somewhere at 4:00 and you haven't left yourself enough time. You start hurrying toward the bus stop. Suddenly you see the bus pulling up. You start to run. But just as you reach the back door, the front door closes and the bus takes off... It's going to be 20 minutes before the next bus comes. Now you're going to be really late.*

*It makes you want to:*

- scream
- hurl yourself on the ground and throw a tantrum
- hurl yourself in front of an oncoming car and spare yourself the pain of the rest of your life.

In situations like those, people consider doing some pretty unrealistic things. After all, you need to do something to release the tension. When you feel angry, frustrated, nervous or depressed, your whole body tenses. That's why your first impulse is often to strike out — to hit something or throw something across the room. That's your body's way of releasing tension. Of course, there's a down side to that. Your tension may be gone, but you'll be left sucking your bruised knuckles or paying for a broken window. So you might want to choose another option for releasing tension. One that's equally effective — but less risky — is exercise.

The beauty of exercise is that it releases physical tension and your emotional tension disappears, too. Go for a run when you're feeling depressed or angry, and you'll come back mellow and tension-free. Do an energetic bike ride when you've heard bad news, and the endorphins you release while riding will make you relaxed and able to cope. Your problem will still be there when you return — but you'll be in a much better frame of mind for handling it.



**“This guy I really liked broke up with me. It killed me. And my best friend was away; I couldn't even call her. I had to do something, so I went for a run. I don't even like running, but when I got back I felt better. I was still sad, but I wasn't so devastated by it.”**

## **QUICK FIX II: THE EXERCISE ENERGY BOOSTER**

Exercise also comes in handy when you need a quick shot of energy.

*You're sitting in English class. The teacher has given a writing assignment and the blank paper is staring you in the face. Try as hard as you might (which isn't all that hard), you just can't bring yourself to start thinking about it. There's nothing really hard about the assignment. You know if you buckled down you could do it. But somehow, that bird pecking*



*at the window sill keeps distracting you. So do the fingers of the girl in front of you twirling her hair. Actually, a short nap right now would feel pretty good. But, oh yeah, you've got to do that English assignment...*

**You need exercise! A quick bout of exercise will get your mind going and your energy level pumped up. It will cause you to breathe deeply, inhaling oxygen to stimulate your brain, and it will release endorphins and norepinephrine to give you energy without tension.**

**Now obviously in many situations you can't just jump up and head out for a run. But there are discreet, 20-second exercises you can do while sitting at a desk or standing in the hall that won't attract attention. Or, you can duck into a bathroom for 20 seconds if you want more privacy. Next time you're feeling tense in public try one of these:**