



Cardio Blaster

for Wellness Warriors



How to find your Resting Heart Rate:

1. Step 1

Take your pulse first thing in the morning before engaging in any significant [activity](#). Because the resting heart rate is a representation of the least amount of beats required to sustain the body, taking the pulse upon waking is the best time to get an accurate reading.

2. Step 2

Place the index and middle fingers on either side of the neck, or the thumb side of the wrist to find the radial or carotid pulse.

3. Step 3

Count the beats starting at zero and continue counting for one minute.

4. Step 4

Record the number of times the heart beats in one minute. This number reflects cardio [fitness](#). A man of average cardio fitness should expect a resting heart rate of 70 beats per minute. For women, 75 beats per minute is the average.

5. Step 5

Repeat for 3 mornings and add them up and divide by 3 to get your average resting Heart Rate. Record the resting heart rate over a period of time to determine if cardio fitness is improving. As your **cardio fitness improves**, your resting **heart rate will decrease**.

% MAX Heart Rate Formula

USE WITH PAGES 6-9

Take your age and resting heart-rate and select your gender to complete the calculation. Estimate your maximum heart-rate as follows:

$$\text{Males MAX HR (MHR)} = 214 - (0.8 * \text{age})$$

$$\text{Females MAX HR (MHR)} = 209 - (0.7 * \text{age})$$

The training zone values are calculated using the Karvonen formula:

$$\text{Target \%MHR} = [(\text{Max HR} - \text{Resting HR}) * (\%X / 100)] + \text{Resting HR}$$

(where %X = %MHR, e.g. 60%MHR use 60 in the formula)

Maximal heart rate generally declines with age from about 220 beats per minute in childhood to about 160 beats per minute at age 60. This fall in heart rate is fairly linear, decreasing by approximately 1 beat per minute per year. There is no strong evidence to suggest that training influences the decline in maximal heart rate. It should be remembered that individuals of the same age may have quite different maximal heart rates- therefore it is more accurate to calculate this value by undergoing a stress-test than by using an age-related formula. On the other hand, resting heart rate is greatly influenced by endurance training.

The typical adult has a resting heart rate of about 72 bpm whereas highly trained runners may have readings of 40 bpm or lower.

Interval training: Can it boost your calorie-burning power?

Interval training is a powerful tool for novice exercisers and accomplished athletes alike. Here's how it works.

Are you ready to shake up your workout routine? Do you wish you could burn more calories without spending more time at the gym? Consider aerobic interval training. Once the domain of elite athletes, interval training has become a powerful tool for the average exerciser, too.

What is interval training?

It's not as complicated as you might think. Interval training is simply alternating bursts of intense activity with intervals of lighter activity.

Take walking. If you're in good shape, you might incorporate short bursts of jogging into your regular brisk walks. If you're less fit, you might alternate leisurely walking with periods of faster walking. For example, if you're walking outdoors, you could walk faster between certain mailboxes, trees or other landmarks.

What can interval training do for me?

Whether you're a novice exerciser or you've been exercising for years, interval training can help you jazz up your workout routine. Consider the benefits:

- **You'll burn more calories.** The more vigorously you exercise, the more calories you'll burn — even if you increase intensity for just a few minutes at a time.
- **You'll improve your aerobic capacity.** As your cardiovascular fitness improves, you'll be able to exercise longer or with more intensity. Imagine finishing your 60-minute walk in 45 minutes — or the additional calories you'll burn by keeping up the pace for the full 60 minutes.
- **You'll keep boredom at bay.** Turning up your intensity in short intervals can add variety to your exercise routine.
- **You don't need special equipment.** You can simply modify your current routine.

How will my muscles respond to interval training?

During intense exercise, muscles produce waste products that can contribute to muscle soreness. Too many accumulated waste products can make exercise painful and exhausting. But by alternating bursts of intense exercise with easier intervals, you'll help reduce the buildup of waste products in your muscles. The result is more comfortable exercise.

Are the principles of interval training the same for everyone?

Yes — but you can take interval training to many levels. If you simply want to vary your exercise routine, you can determine the length and speed of each high-intensity interval based on how you feel that day. After warming up, you might increase the intensity for 30 seconds and then resume your normal pace. The next burst of more intense activity may last two to three minutes. How much you pick up the pace, how often and for how long is up to you.

If you're working toward a specific fitness goal, you may want to take a more scientific approach. A personal trainer or other expert can help you time the intensity and duration of your intervals — which may include movement patterns similar to those you'll use during your sport or activity — based on your target heart rate, the ability of your heart and lungs to deliver oxygen to your muscles (peak oxygen intake) and other factors. This type of interval training also adds variety to your workout, but it requires more discipline and concentration.

Does interval training have risks?

Interval training isn't appropriate for everyone. If you have a chronic health condition or haven't been exercising regularly, consult your doctor before trying any type of interval training.

Also keep the risk of overuse injury in mind. If you rush into a strenuous workout before your body is ready, you may hurt your muscles, tendons or bones. Instead, start slowly. Try just one or two higher intensity intervals during each workout at first. If you think you're overdoing it, slow down. As your stamina improves, challenge yourself to vary the pace. You may be surprised by the results.

7 Tips for Staying Motivated

Fitness doesn't have to be drudgery. Stay motivated by setting goals and choosing activities you enjoy.

1. Set goals

Start with simple goals and then progress to longer range goals. Remember to make your goals realistic and achievable. It's easy to get frustrated and give up if your goals are too ambitious. For example, if you haven't exercised in a while, a short-term goal might be to walk five minutes once or twice a day. An intermediate goal might be to walk 20 minutes three or four times a week. A long-term goal might be to complete a 5K walk.

2. Make it fun

Find sports or activities that you enjoy, then vary the routine to keep you on your toes. If you're not enjoying your workouts, try something different. Join a volleyball or softball league. Take a ballroom dancing class. Check out a health club or martial arts center. Discover your hidden athletic talent. Remember, exercise doesn't have to be drudgery — and you're more likely to stick with a fitness program if you're having fun.

3. Make physical activity part of your daily routine

If it's hard to find time for exercise, don't fall back on excuses. Schedule workouts as you would any other important activity. You can also slip in physical activity throughout the day. Be creative! Take a walk during your child's music lesson. Take the stairs instead of the elevator at work. Pedal a stationary bike or do strength training exercises with resistance tubing while you watch TV at night.

4. Put it on paper

Are you hoping to lose weight? Boost your energy? Sleep better? Manage a chronic condition? Write it down! Seeing the benefits of regular exercise on paper may help you stay motivated. It may also help to keep an exercise diary. Record what you did during each exercise session, how long you exercised and how you felt afterward. Recording your efforts can help you work toward your goals — and remind you that you're making progress.

5. Join forces with friends, neighbors or others

You're not in this alone. Invite friends or co-workers to join you when you exercise. Work out with your partner or other loved ones. Play soccer with your kids. Organize a group of neighbors to take fitness classes at a local health club.

6. Reward yourself

After each exercise session, take a few minutes to savor the good feelings that exercise gives you. This type of internal reward can help you make a long-term commitment to regular exercise. External rewards can help, too. When you reach a longer range goal, treat yourself to a new pair of walking shoes or new tunes to enjoy while you exercise.

7. Be flexible

If you're too busy to work out or simply don't feel up to it, take a day or two off. Be gentle with yourself if you need a break. The important thing is to get back on track as soon as you can.

Now that you're enthusiastic again, get moving! Set your goals, make it fun and pat yourself on the back from time to time. Remember, physical activity is for life. Review these tips whenever you feel your motivation sliding.

$$210 - .5(\text{AGE}) - .5(\text{LBS}) + 4(\text{MEN}) + 0(\text{WOMEN}) = \text{MAX HEART RATE}$$

CARDIO 1

ZONE	MINUTES	% MAX HEART RATE
ZONE 1- WARM UP	2 MINUTES	50% MHR
ZONE 2- WARM UP	3 MINUTES	70% MHR
INTERVAL SET		
ZONE 3	3 MINUTES	80% MHR
ZONE 2	1 MINUTE	70% MHR
AT	3 MINUTES	180- AGE
ZONE 2	1 MINUTE	70% MHR
ZONE 4	2 MINUTES	90% MHR
ZONE 2	2 MINUTES	70% MHR
REPEAT INTERVAL 3X		
ZONE 2-COOL DOWN	3 MINUTES	70% MHR
ZONE 1- COOL DOWN	2 MINUTES	50% MHR

$$210 - .5(\text{AGE}) - .5(\text{LBS}) + 4(\text{MEN}) + 0(\text{WOMEN}) = \text{MAX HEART RATE}$$

CARDIO 2

ZONE	MINUTES	% MAX HEART RATE
ZONE 1-WARM UP	2 MINUTES	50% MHR
ZONE 2- WARM UP	5 MINUTES	70% MHR
INTERVAL SET		
ZONE 3	3 MINUTES	80% MHR
AT	2 MINUTES	180-AGE
ZONE 2	3 MINUTES	70% MHR
ZONE 3	4 MINUTES	80% MHR
AT	1 MINUTE	180-AGE
ZONE 2	2 MINUTES	70% MHR
REPEAT INTERVAL 3X		
ZONE 2-COOL DOWN	3 MINUTES	70% MHR
ZONE1 -COOL DOWN	2 MINUTES	50% MHR

$$210 - .5(\text{AGE}) - .5(\text{ILBS}) + 4(\text{MEN}) + 0(\text{WOMEN}) = \text{MAX HEART RATE}$$

CARDIO FOR WEIGHT LOSS

ZONE	MINUTES	% MAX HEART RATE
ZONE 1- WARM UP	2 MINUTES	50 % MHR
ZONE 2- WARM UP	5 MINUTES	70% MHR
INTERVAL SET		
ZONE 3	8 MINUTES	80% MHR
ZONE 2	2 MINUTES	70% MHR
ZONE 3	8 MINUTES	80% MHR
ZONE 2	2 MINUTES	70% MHR
ZONE 3	3 MINUTES	80% MHR
ZONE 2	2 MINUTES	70% MHR
REPEAT INTERVAL 2X		
ZONE 2- COOL DOWN	3 MINUTES	70% MHR
ZONE 1- COOL DOWN	2 MINUTES	50% MHR

$$210 - .5(\text{AGE}) - .5(\text{LBS}) + 4(\text{MEN}) + 0(\text{WOMEN}) = \text{MAX HEART RATE}$$

ADVANCED CARDIO

ZONE	TIME	% MAX HEART RATE
ZONE 1-WARM UP	2 MINUTES	50% MHR
ZONE 2 -WARM UP	3 MINUTES	70% MHR
INTERVAL SET		
ZONE 3	3 MINUTES	80% MHR
AT	1 MINUTE	180 - AGE
ZONE 2	2 MINUTES	70% MHR
ZONE 3	3 MINUTES	80% MHR
ZONE 4	1 MINUTE	90% MHR
ZONE 2	2 MINUTES	70% MHR
REPEAT INTERVAL SET 3X		
ZONE 2- COOL DOWN	3 MINUTES	70% MHR
ZONE 1- COOL DOWN	2 MINUTES	50% MHR