

# AMBIENT HEART RATE ASSESSMENT

STATION

1

Ambient heart rate is a measure of the number of beats per minute your heart contracts when you are awake but in a sedentary position.

## INSTRUCTIONS

1. Sit down quietly for five minutes.
2. During this time, relax and record your heart rate every 60 seconds for five minutes (you will have a total of five heart rates when finished).
3. Average your five recordings to calculate your ambient heart rate.

A lower ambient heart rate usually indicates a fitter heart muscle. Ambient heart rate is a measure of relative stress.

As with all heart rate measures used to assess fitness, this test needs to be repeated regularly to provide an accurate picture of health.

# STANDING DELTA HEART RATE ASSESSMENT

STATION

2

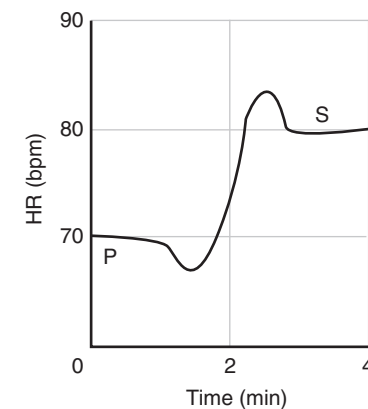
Delta heart rate is the difference between your heart rate when lying down and your heart rate when standing up. This assessment is also known as the orthostatic test.

## INSTRUCTIONS

1. Lie on your back and relax totally for two minutes. This is the prone position (P).
2. Periodically look at your heart rate monitor and note the number.
3. Slowly stand up and watch your heart rate increase on your heart rate monitor.
4. After two minutes, note your standing heart rate (S).
5. Subtract your P heart rate from your S heart rate. This is your standing delta heart rate.

Delta heart rate is best interpreted as a variable and range of scores. Generally, the lower your delta heart rate number is, the lower your total relative stress is.

1-10	Low; excellent
11-20	Normal; good
21-30	Higher than normal; if your delta heart rate is in this range, you should take the day off from exercise or change to a workout in zone 1.
30+	Cautionary



From D. Swaim, 2013, *Heart education* (Champaign, IL: Human Kinetics).

# RECOVERY HEART RATE ASSESSMENT

STATION

3

Recovery heart rate is how many beats per minute your heart rate drops when you stop exercising. Generally, the faster it drops, the fitter you are.

## INSTRUCTIONS

1. Warm up adequately.
2. Choose any activity in which you can slowly increase speed until your heart rate is at the midpoint of zone 3, and then maintain that intensity for three minutes.
3. Stop exercising and note your heart rate.
4. Rest for one minute and do a complete recovery. You may want to use some relaxation or bio-feedback techniques to enhance your recovery.
5. Record your new heart rate. Calculate your recovery heart rate by subtracting your 60-second postexercise heart rate from the heart rate number you noted in step 3 (midpoint of zone 3).

Normal recovery heart rate values are between 20 and 30 beats per minute (bpm) for the first 60 seconds. The higher your recovery heart rate is, the fitter you are.

# THRESHOLD HEART RATE ASSESSMENT

STATION

4

Threshold heart rate is an exercise intensity level at which the body crosses over from aerobic to anaerobic metabolism. It is a movable threshold that improves with conditioning; it is also the ceiling of the fat-burning range called fatmax.

## INSTRUCTIONS

1. Warm up adequately.
2. Select an activity that you enjoy and that you can maintain at a constant pace for three minutes.
3. Gradually increase your intensity until you reach the highest heart rate you can sustain for three minutes.
4. Reduce your intensity and recover for two minutes.
5. Repeat the cycle: quickly increase your intensity until you reach the same high heart rate number you reached in step 3, and sustain it for three minutes.
6. Recover and cool down.

The highest heart rate you can sustain for six minutes with a brief rest in the middle is your estimated threshold heart rate.

# HEART ZONES CIRCUIT 800

STATION

5

The circuit 800 assesses your fitness improvement by measuring changes in your elapsed time.

## INSTRUCTIONS

1. Determine your midpoint of zone 3 (75 percent of your maximal heart rate).
2. Warm up adequately for 5 to 10 minutes.
3. After increasing your heart rate to the midpoint of zone 3, measure the amount of time it takes you to complete an 800-meter run holding your heart rate steady at 75 percent of your maximal heart rate.
4. Record your time.
5. Once you complete this test a second time, and with every subsequent test, calculate the time difference between sessions to see if your fitness level is improving.

If your elapsed time improves (i.e., it takes you less time to run 800 meters), you are getting fitter.