

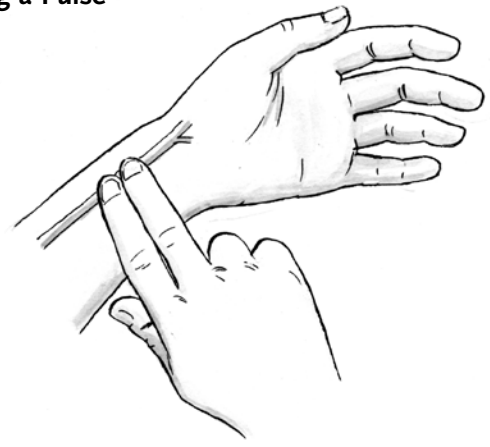
# Matters of the Heart

Fitness is determined by a number of factors, including the type of diet you choose and the amount of exercise you get. Part of being fit is having a healthy heart. In this activity, you will take a look at your heart health by investigating how quickly your heart recovers after exercise.

## Procedure

- 1 Work with your partner to practice finding each other's pulse. (See *Finding a Pulse* for directions.) Make sure you are sitting and resting. Count the number of beats (pulses) that occur in 15 seconds. Practice until you get two consistent measurements in which the values you obtain are within one to three beats of each other per minute.
- 2 Each partner should take the pulse of the other three times (each time for 15 seconds). Record these on your "Data Sheet" handout. If necessary, repeat the procedure until the three values are within one to three beats of each other per minute.
- 3 Multiply the average of your three trials by four to determine your resting heart rate per minute.
- 4 Now for some exercise: Decide with your partner who will go first. The person who goes first will perform 50 jumping jacks. The other partner will take the exerciser's pulse for 15 seconds *immediately* after the exercise stops. This value should be recorded under Pulse Rate next to "0" under Time after Exercise. Then, 45 seconds later, take the pulse for another 15 seconds. (Each 15 seconds of recorded pulse will take up the first quarter of each minute interval.) Record this value under the Minute 1 entry. Continue to take and record pulse measurements for up to 7 minutes after finishing the exercise.

## Finding a Pulse



Use the tips of the first two fingers as shown in the diagram. You will find the pulse on the thumb-side of the wrist and will need only gentle pressure to feel the pulsation. Having your partner bend his wrist slightly inward may help find the pulse. Don't use your thumb to take the pulse because it has a tiny pulse of its own that could confuse your count.

- 5 Multiply your data by four to determine beats per minute.
- 6 When the data is collected, repeat the procedure for the remaining partner.
- 7 When both team members have collected their data, each team member should graph his or her data on the "Plotting Your Results" handout and answer the questions listed on the handout.