



## Measuring Resting Heart Rate (RHR)

### What is a Resting Heart Rate (RHR)? Why is it important?

- The number of heart beats per minute while a heart is at rest
- Knowing someone's RHR can give you an idea about how well a person's heart is functioning
  - A lower heart rate (fewer heart beats per minute) at rest implies more efficient heart function and better cardiovascular fitness
  - A high (more than 100 beats per minute) or low (less than 60 beats per minute) heart rate may indicate some kind of health problem
- What's normal?
  - For most adults, a normal resting heart rate ranges from 60 to 100 beats per minute
  - For children less than 10, normal resting heart rates vary by age:
    - Children 5 to 6 years old: 75 to 115 beats per minute
    - Children 7 to 9 years old: 70 to 110 beats per minute
- It is important to have an ongoing record of resting heart rate to track health changes and progress towards Athlete's goals.

### How do you measure someone's Resting Heart Rate (RHR)?

- Using the Wrist (Radial Pulse)
  - To check for pulse on a wrist, place two fingers between the bone and the tendon over the radial artery — *which is located on the thumb side of a person's wrist*
  - This is about 1/2 inch on the inside of the joint, in line with the index finger
  - Find the pulse (beats of the heart)
  - Count the number of heart beats in 15 seconds, and multiply by four (heart beats in 15 seconds x 4 = Resting Heart Rate)
- Using the Neck (Carotid Pulse)
  - To check for pulse on the neck, place your index and middle fingers on the Athlete's neck to the side of the windpipe, just below their jawbone
  - Be careful not to press too hard
  - Find the pulse (beats of the heart)
  - Count the number of heart beats in 15 seconds, and multiply by four (heart beats in 15 seconds x 4 = Resting Heart Rate)
- Resting Heart Rate Apps
  - With these Apps you use your phone's camera and a person's finger to collect their RHR.
  - Be sure to read the fine print of each app before downloading and using
  - Available Apps:
    - Instant Heart Rate: HR Monitor & Pulse Checker
    - Runtastic Heart Rate PRO
    - Heart Rate Monitor
    - Cardio: Heart Rate Monitor
- Record measurement numbers and the type of measurement used (wrist, neck, app) on provided forms.

### Recommendations for the most accurate measurement:

- Set up a Resting Heart Rate station in a quiet location
- Have chairs, benches or medical beds in the station
- Measure resting heart rate before any exercise, stretching or fast paced activities
- Measure before drinking any caffeine or wait for one hour to pass if someone has had caffeine



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- Have participants sit or lay down and remain still for at least 5-10 minutes before measuring

### **Things that can affect Resting Heart Rate:**

- Exercise: someone's heart rate can continue to be high for up to two hours after working out
- Stress and emotions: someone's heart rate can continue to be high for up to two hours after a stressful event
- Caffeine: caffeine can affect a heart rate for up to an hour after it has been consumed
- Age: as a person gets older their heart rate may increase
- Medication: medications can make heart rates both increase and decrease
  - Medications for asthma, depression, obesity, and attention deficit disorder (ADD) can increase someone's resting heart rate
  - Medications for high blood pressure and heart conditions can decrease someone's resting heart rate
- Smoking
- Environmental conditions like temperature
- Body position (standing up or lying down)
- Having a cardiovascular disease, high cholesterol or diabetes