

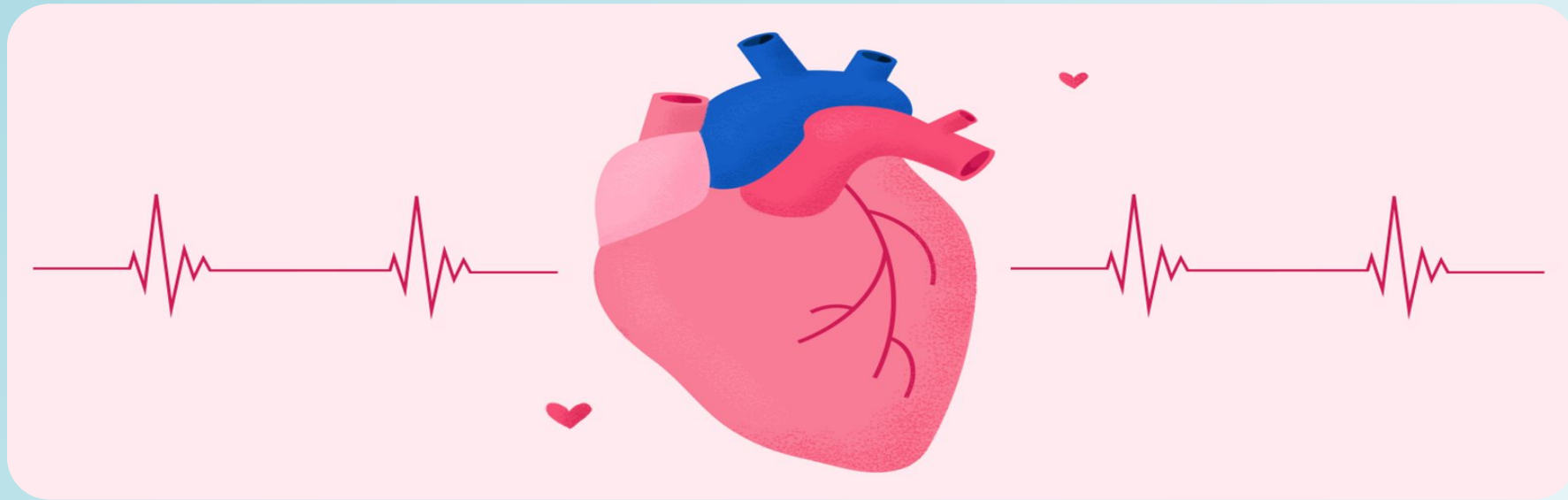


# Importance of *Heart Rate* for Your Health

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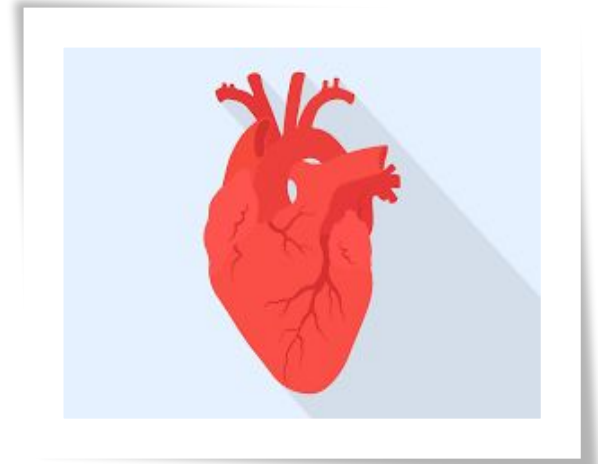
Curans Heart Centre, Northern Hearts

# What Does Heart Rate (HR) Mean?

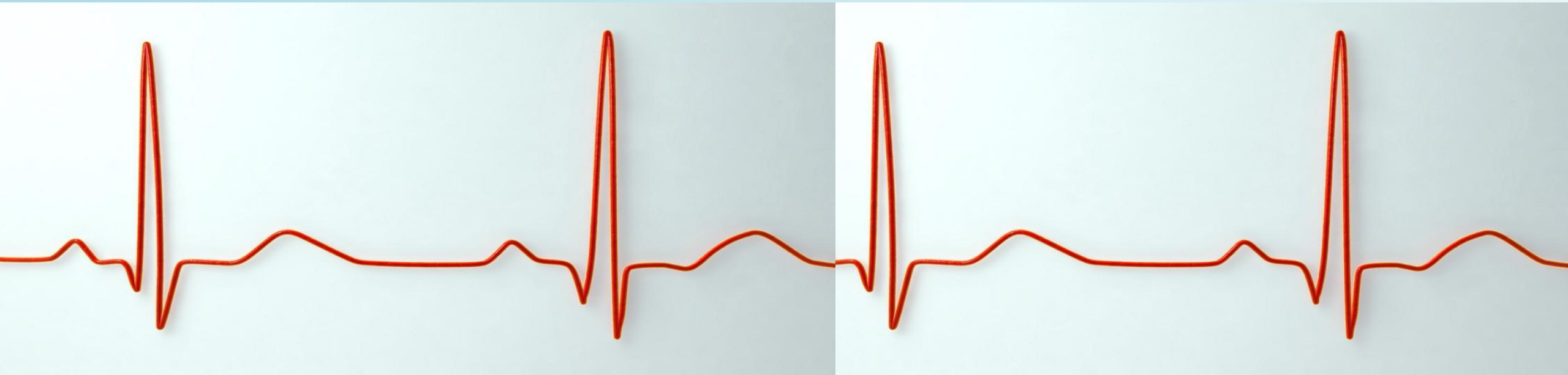


# Heart Rate

- ❑ Heart Rate is the number of times your heart beats in one minute
- ❑ The beating sound is the open and closing of the heart valves
- ❑ It varies from person to person
- ❑ It is lower at rest and higher with exercise
  - ❑ More oxygen rich blood is needed by your body when you exercise
- ❑ Your heart will often beat 115,000 times a day and pumps 2,000 gallons of blood



# What Does MY Heart Rate Mean?



# MY Heart Rate: How to Take Your Pulse

1. Place the tips of your index, second and third fingers on the palm side of your other wrist below the base of the thumb. Or, place the tips of your index and second fingers on your lower neck on either side of your windpipe.
2. Press lightly with your fingers until you feel the blood pulsing beneath your fingers. You may need to move your fingers around slightly up or down until you feel the pulsing.
3. Use a watch with a second hand, or look at a clock with a second hand.
4. Count the beats you feel for 10 seconds. Multiply this number by six to get your heart rate (pulse) per minute.

Count your pulse: \_\_\_\_ beats in 10 seconds x 6 = \_\_\_\_ beats/minute

# MY Heart Rate: *What is a normal pulse?*

- ❑ Normal Heart Rates at Rest:
  - ❑ Children (6-15) = 70-100 beats per minute
  - ❑ Adults (over 18) 60-100 beats per minute
- ❑ Maximum Heart Rate =  $220 - \text{your age} = \text{predicted maximum heart rate}$



*It is important to note that some medications and medical conditions may affect your heart rate. Always ask your family doctor on how your heart rate may be affected.*

- **Age: 50**
  - Target Heart Rate (HR) Zone (60-85%): 102 – 145
  - Predicted Maximum HR: 170
- **Age: 55**
  - Target Heart Rate (HR) Zone (60-85%): 99 – 140
  - Predicted Maximum HR: 165
- **Age: 60**
  - Target Heart Rate (HR) Zone (60-85%): 96 – 136
  - Predicted Maximum HR: 160
- **Age: 65**
  - Target Heart Rate (HR) Zone (60-85%): 93 – 132
  - Predicted Maximum HR: 155
- **Age: 70**
  - Target Heart Rate (HR) Zone (60-85%): 90 – 123
  - Predicted Maximum HR: 150

**MY Heart  
Rate: *What is  
my target  
heart rate?***

# Heart Rate and the Effects on the Body



# High Heart Rate

- ❑ Tachycardia is the medical term for a heart rate above 100 beats per minute
- ❑ Rhythm disorders can cause this
- ❑ Sometimes its normal to have a higher heart rate such as during exercise, illness, or stress
- ❑ Having a high heart rate can cause heart failure, stroke, or sudden cardiac arrest
- ❑ **Causes:** anemia, drinking, smoking, overactive thyroid
- ❑ **Symptoms:** shortness of breath, lightheadedness, rapid pulse, chest pain, fainting
- ❑ **Treatments include:** medicine, medical procedures



# Low Heart Rate

- ❑ Bradycardia is a slower than normal heart rate (slower than 60 beats a minute)
- ❑ This means that the heart isn't pumping enough oxygen-rich blood to the body
- ❑ Causes: heart tissue damaged related to aging, damage due to heart attack, underactive thyroid gland, imbalance of chemicals in the blood, inflammatory disease, and medications
- ❑ Symptoms: dizziness, fatigue, confusion, chest pains, easily tired during exercise
- ❑ Prevention: exercise and eat healthy, maintain healthy weight, no smoking, manage stress, and keep blood pressure and cholesterol controlled



# Monitoring Your Heart Rate



# Heart Rate at Home



☐ Monitoring your heart rate at home is recommended for all patients

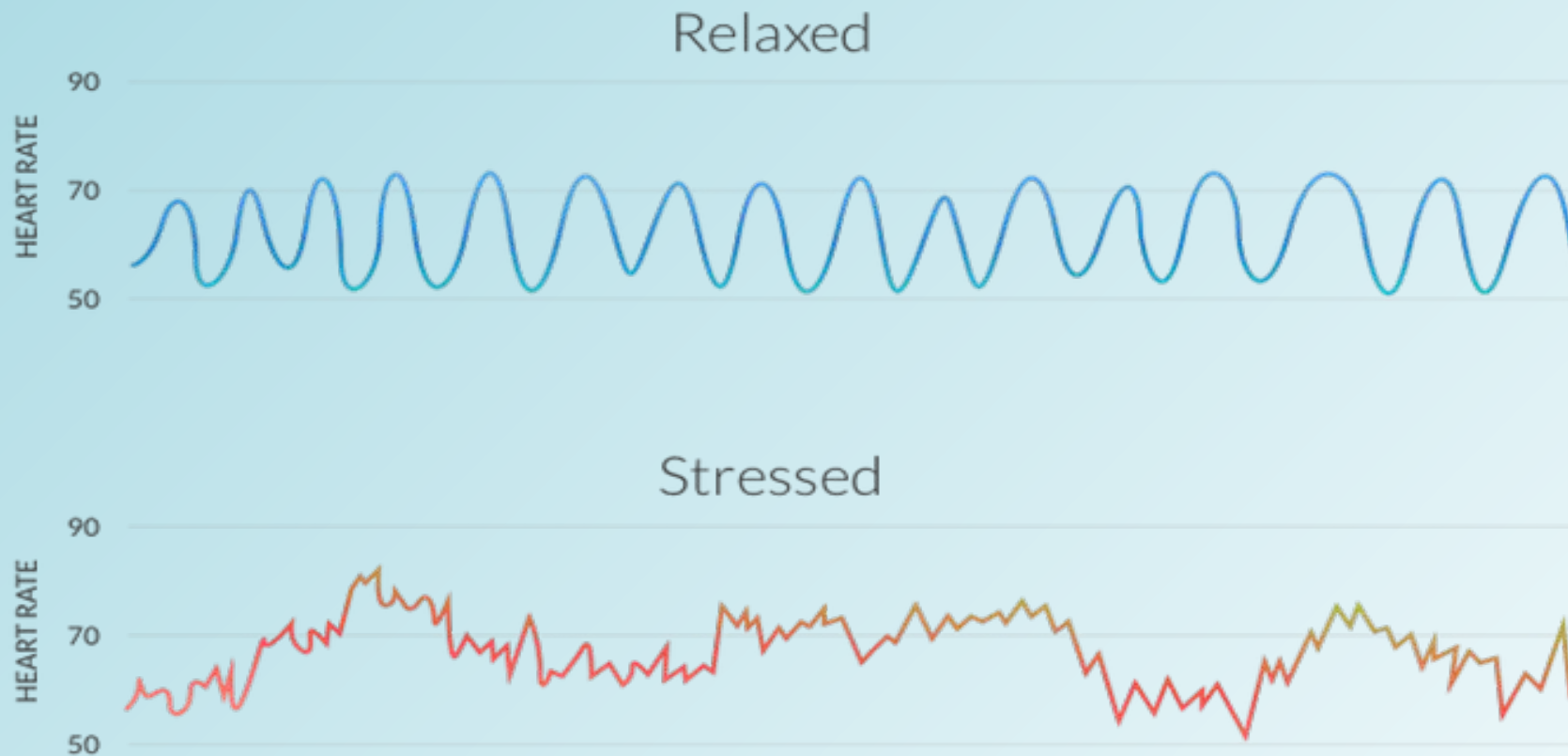
☐ Monitoring allows you to rule out white coat syndrome where your vital signs are elevated due to stress at the doctors office



☐ Home heart rates are said to be better predictors of your actual rate compared to in office reads



# Heart Rate Management



# Management Tips

❑ Lifestyle changes can boost your heart health and lower your pulse:

- ❑ Get moving
- ❑ Manage stress and anxiety
- ❑ Avoid excess caffeine and nicotine
- ❑ Maintain a healthy weight
- ❑ Stay hydrated
- ❑ Sleep well



# Advice from Dr. Lai





# Workout Session

30 minutes

# Warm-Up

# 30 Seconds Each Exercise

- ✓ Marching on the spot
- ✓ Arm circles
- ✓ Lateral steps w touch
- ✓ Lateral butt kicks
- ✓ Ankle circles
- ✓ Hip circles
- ✓ Trunk rotations
- ✓ Lateral toe taps
- ✓ ½ Neck circles (slow and controlled)
- ✓ Toe touches



# **Guided Aerobic Exercises**

# Remember...

- ☐ Always maintain a proper body position
- ☐ Breathe during each exercise
  - ☐ Holding your breath increases your internal pressure, thus increasing your blood pressure
- ☐ Not sure if you are doing it correct? Ask!



# Session Breakdown

First Round 6 min	Second Round 6 min	Third Round 6 min
2 sets of exercises, 30 seconds on, 30 seconds off for three rounds	2 sets of exercises, 30 seconds on, 30 seconds off for three rounds	2 sets of exercises, 30 seconds on, 30 seconds off for three rounds

Start

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End

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Start

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End

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Start

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End

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Start

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End

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Start

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End

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# Cool-Down

# 30 Seconds Each Stretch

## In Chair:

- ✓ Wrist flexor stretch
- ✓ Trunk rotation
- ✓ Quadratus lumbar. Stretch
- ✓ Cat Camel
- ✓ Side bend
- ✓ Shoulder rolls
- ✓ Knee to chest
- ✓ Posterior shoulder stretch
- ✓ Side lunge
- ✓ 3 Deep breaths



# References

Cleveland Clinic. (2021). Pulse and Heart Rate.

<https://my.clevelandclinic.org/health/diagnostics/17402-pulse--heart-rate>

Mayo Clinic. (2021). Tachycardia.

<https://www.mayoclinic.org/diseases-conditions/tachycardia/symptoms-causes/syc-20355127>

Mayo Clinic. (2021). Bradycardia.

<https://www.mayoclinic.org/diseases-conditions/bradycardia/symptoms-causes/syc-20355474>