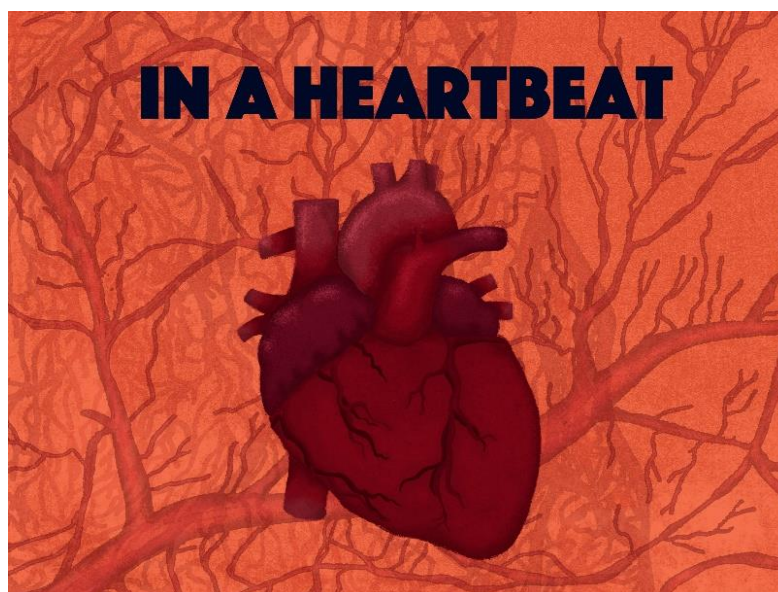


Centre of the Cell's 'In a Heartbeat' Challenge



What happens to your heart rate after you exercise?

What is heart rate? It's the number of times your heart beats in a minute. When resting, a healthy heart rate for an adult is around **60 to 80 beats per minute**. A healthy resting heart rate for a child can be up to **100 beats per minute**.

How do I find out what my heart rate is?



First, you need to find your **pulse**.

How? Take two fingers and place them on your wrist, directly under your thumb. You should feel a gentle and frequent 'push' under your skin. This is your pulse

Tip: It might take a while to find your pulse. Make sure you press gently – not too hard, or too soft, and don't use your thumb. If you are struggling, try to find your pulse in your neck instead.

Our heart is found in the centre of our chest, so why are we trying to find our heart rate from our wrist? Every time your heart beats, all of your arteries stretch a little as your blood is pushed around your body. This is what you can feel when you place two fingers on your wrist or your neck.

Once you've found your pulse, **find your heart rate** by counting the number of beats you feel in one minute. Now you're ready to try an experiment – turn over the page!

What happens to your heart rate when you exercise?

Do you think your heart will beat faster or slower? Make a prediction, then test out your prediction by doing your own experiment at home:

Step 1: Write down your heart rate after a period of rest (when you've been relaxing)

Step 2: Use a stopwatch to time yourself, and do 2 minutes of any kind of physical activity that gets you out of breath. You could do some star jumps, run up and down a staircase, or have a mini dance party!

Step 3: Find your pulse again, check what your heart rate is now and write it down next to your resting heart rate. Has it changed?

Doing regular exercise that increases your heart rate and makes you breathe faster is really good for you because it strengthens your muscles and bones, including your heart.

Children and young people should be aiming to do **60 minutes** of exercise every day.

Examples of activities that will increase your heart rate and keep you healthy:

- Taking a walk in the park
- Walking the dog
- Riding your bicycle or scooter
- Dancing to music
- Playing football with your family
- Joining PE with Joe Wicks on his Youtube channel, The Body Coach

Extension activity

See how your heart rate changes after different types of exercise, or over time. Do certain types of exercise make you sweat more or make you feel warmer?

Record your heart rate before and after exercise every day, using a table like the one below:

Day	Type of exercise	Heart Rate before	Heart Rate after

Let us know how your 'In a Heartbeat' challenge goes on social media @CentreoftheCell!