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# BASIC INFORMATION ABOUT YOUR HEART AND HOW IT WORKS

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**For New Readers of English**



*Provided by:*

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## WHY THIS BOOK WAS WRITTEN

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Health education is an important part of the health system of the United States. The United States is an immigrant nation, and immigrants need health information that meets their cultural needs and recognizes differences in languages, religion, expectations and understanding of health. Lack of understanding issues puts them at risk of diseases which are preventable.

Unfortunately immigrants' expectations and their understanding of the health system are different from what they may have had in their home countries. Health education is not a part of the health system in many countries. Lack of knowledge of our health system and health education can cause many health problems for immigrants. Immigration can be very stressful and may cause confusion, depression, and other psychological problems, especially for refugees, who are not aware of the impact of these psychological problems on their body including their heart.

Immigrants need, but do not get health education on heart problems. Research by the International Health Education Alliance (IHEA), reveals several barriers that immigrants are not able to overcome to get information on health.

Overcoming these barriers such as language, lack of basic information on anatomy, knowledge of technical and medical words and very simple illustrations help the newcomers become educated about their body's organs and learn how to deal with health problems through prevention and early detection.

This booklet contains very simple descriptions of the heart and blood circulation to help immigrants understand to prevent heart problems.

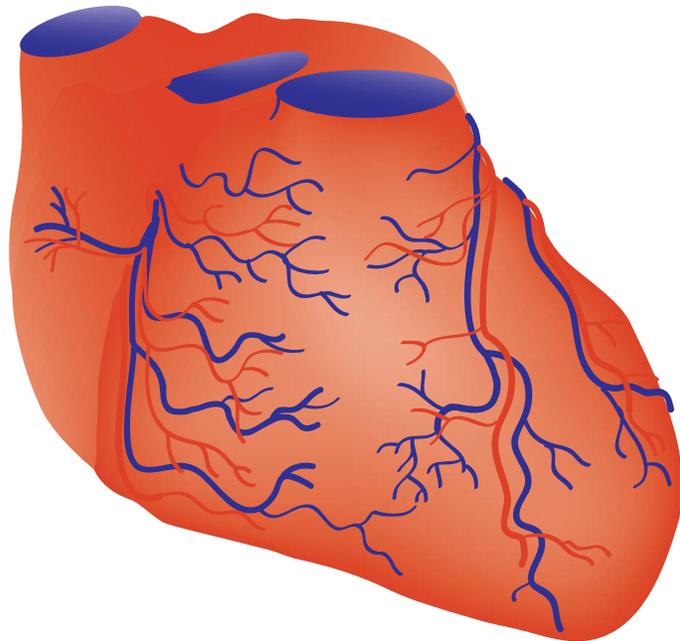
# What is the Heart?

The heart is an organ of our body which controls the flow of blood in the body which contains oxygen that our body uses to function.

The air that we breathe includes oxygen and we need it to be alive and active. The heart has a major role to get oxygen from our lungs and transfer it to our body.

**To become familiar with the heart, we need to learn some basic information about it such as:**

1. *size*
2. *weight*
3. *location*
4. *nature*
5. *construction*
6. *sound*
7. *blood pressure*



***Picture 1: The Shape of a Heart***

*The heart's surface (outside) contains blood vessels that supply your heart with oxygen*

## **How Large is a Heart?**

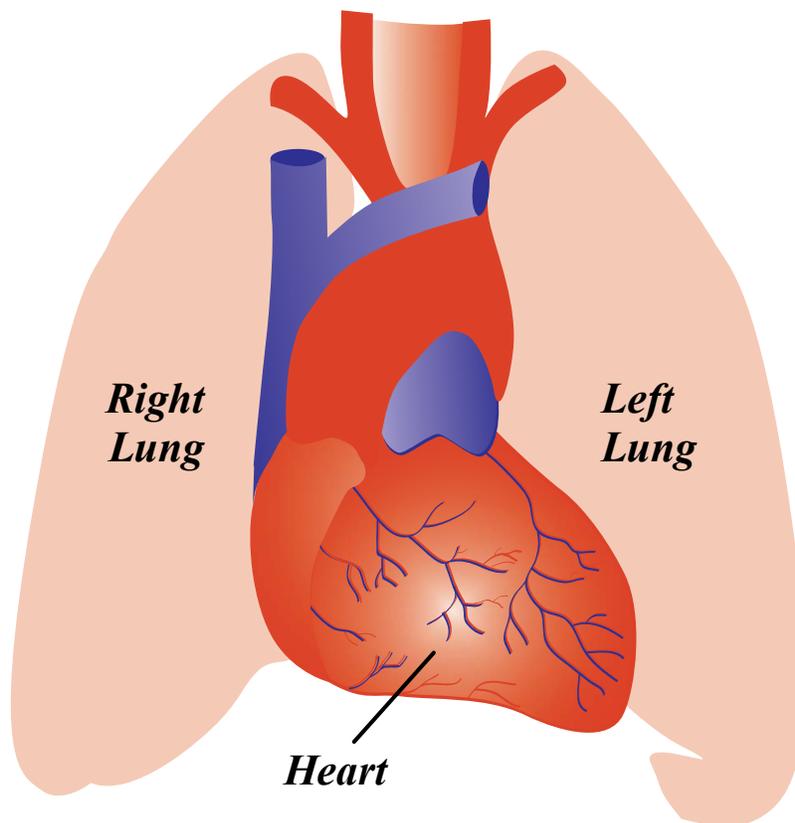
A heart is about the size of a person's fist.

## **How Much Does It Weigh?**

In a man, a heart weighs 280 to 340 grams. In a woman, it weighs 230 to 280 grams. [about the weight of a grapefruit]

## **Where is Heart Located In the Body?**

The heart sits under the breastbone between the lungs. The rib cage protects the heart during falls or hits to the chest.



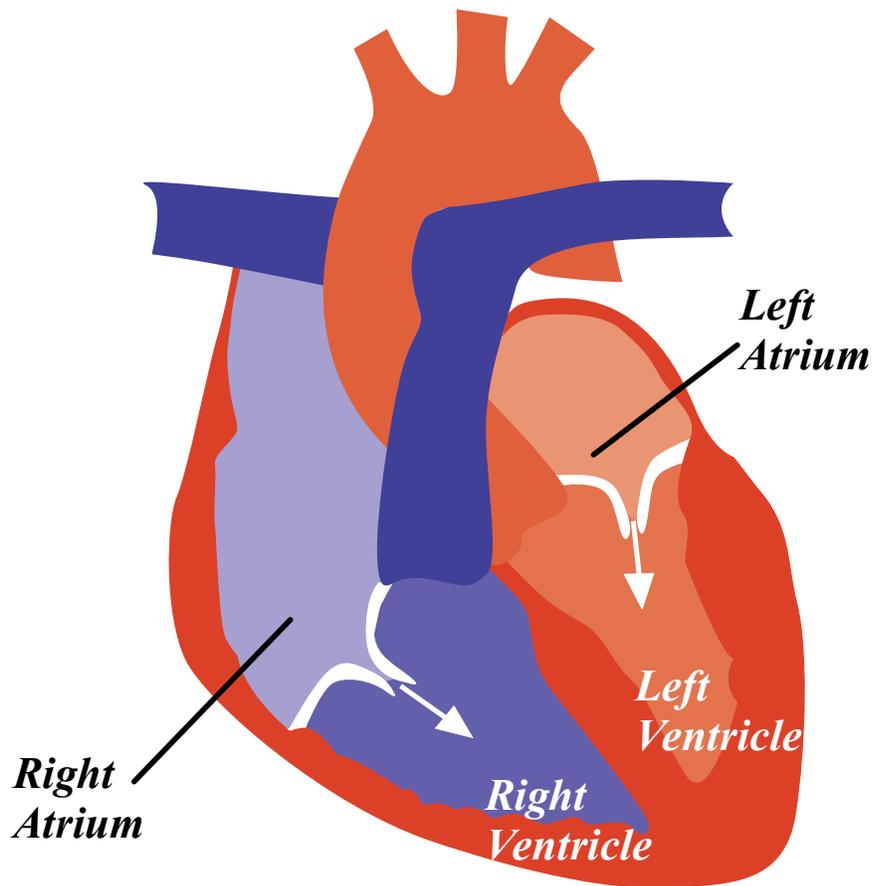
**Picture 2:**  
*The heart is located between the two lungs.*

## What is the Heart Made Of?

The heart is made of a special type of muscle called curdier muscle. Muscles use oxygen to perform work such as moving your arms or legs or to pump blood.

## How Does the Heart Work?

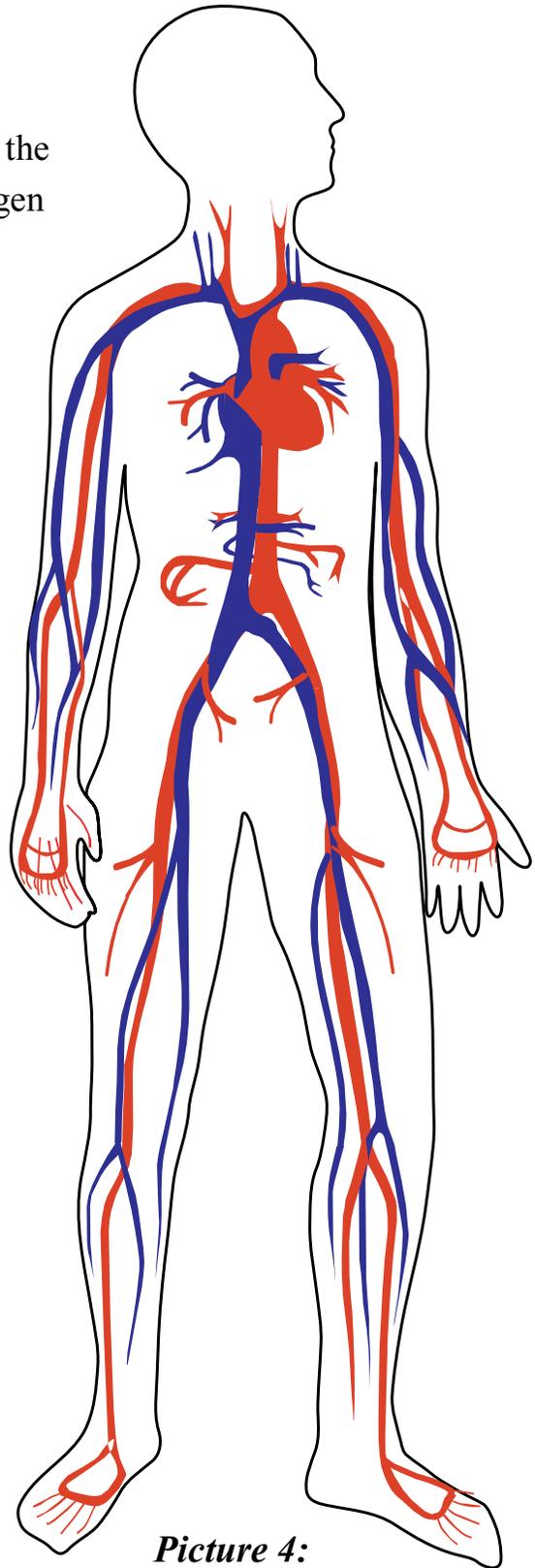
The heart has four chambers; each has a special role in pumping blood. The lower two parts pump blood to the lungs from the right ventricle, or to the body from the left ventricle. The blood flows back into the top two parts, the right and left atrium.



*Picture 3: Four Chambers of the Heart*

## How Does Blood Travel Through the Body?

The right ventricle receives blue blood from the veins and transfers it to the lungs to get oxygen where it turns red. The oxygenated blood returns to the left side of the heart where it is pumped from the left ventricle into the aorta. The aorta is the largest artery in the body. The artery brings oxygenated blood and nutrients to the entire body where organs and muscles use the oxygen for fuel to do work. Once the oxygen is used the blood becomes blue again and it transferred to the veins where it returns to the right ventricle and the cycle repeats itself.



**Picture 4:**  
*The Blood Vessels*

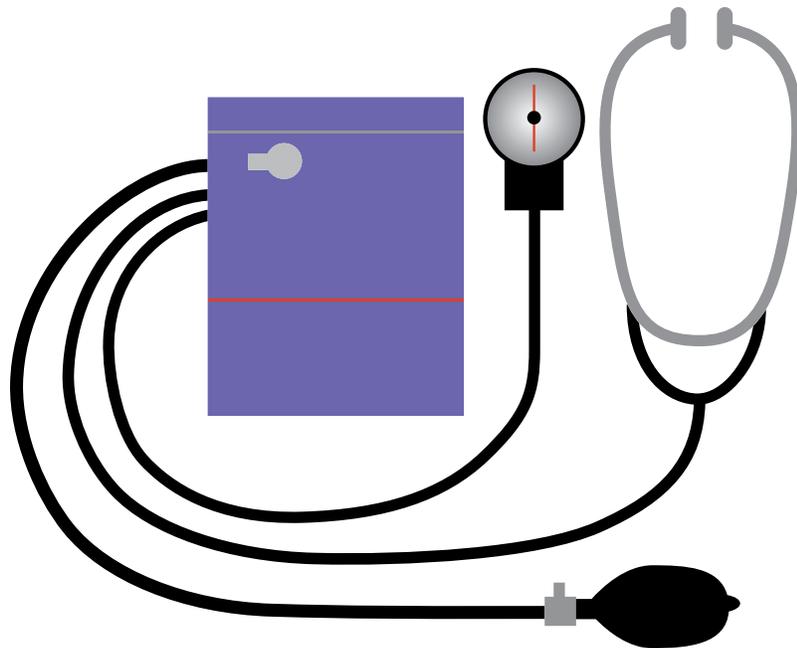
## Why Does the Heart Beat?

The heart starts beating before you are born and beats to the end of our life. Each beat represents a contraction of your heart muscle.

The regular beat of a heart is called a rhythm. By listening to your heart beat, the doctor (a cardiologist) can tell if something is wrong.

## What is Blood Pressure?

Each time the heart beats; it puts pressure on the arteries. This kind of pressure is called blood pressure. Blood pressure is extremely important and must be controlled if it is too high or low. There is a device which monitors the blood pressure. There are traditional (manual) and modern (automatic) blood pressure monitors available in drug stores.



*Picture 5:  
A Traditional (Manual) Blood Pressure Monitor*

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## GLOSSARY

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***Aorta:***

The largest artery in the body. Aorta takes blood from the heart and delivers it to the body.

***Heart chambers:***

Four rooms inside the heart

***Lungs:***

Two breathing organs in the chest of a man and woman.

***Muscle:***

The pieces of elastic materials in the body which can tighten to produce movement.

***Oxygen:***

A gas present in the air, with no color, taste, or smell, but necessary for all forms of life. The heart and brain need oxygen to live.

***Rhythm:***

The regular contraction of your heart muscle.



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