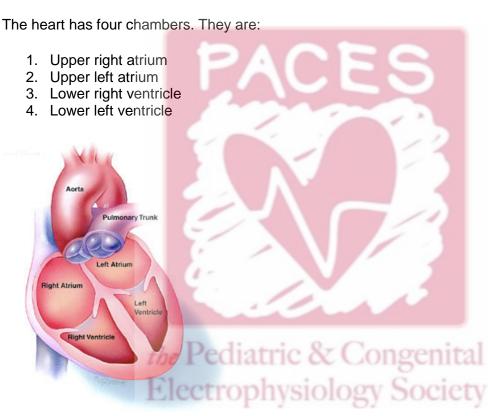
Patient Resources: Anatomy of a Healthy Heart

A child's heart is the center of their cardiovascular system. A normal heart is strong, about the size of an orange and weighs about one pound. Although it is small in size, the heart is extremely powerful. The heart continuously pumps oxygen and nutrient-rich blood throughout the body. On average, the heart beats 100,000 times and pumps about 2,000 gallons of blood (source: <u>American Heart Association</u>). As the blood circulates it collects waste products that will be excreted from the body.



The heart pumps blood through the chambers. The flow of blood through the heart is controlled by four heart valves. The valves open and close as the blood is pumped through the heart. Each valve has a set of flaps (also called leaflets or cusps). All valves have three flaps, except for the mitral valve. Normally, it only has two. As the heart beats it creates pressure that opens the valves which allows blood to flow through the flaps. They make sure the blood only flows in one direction.

- 1. Tricuspid valve (between the right atrium and right ventricle)
- 2. Pulmonary valve (between the right ventricle and pulmonary artery)
- 3. Mitral valve (between the left atrium and left ventricle)
- 4. Aortic valve (between the left ventricle and the aorta)

The two sides of heart have distinct features. The right side receives blood from the body and pumps it to the lungs. The left side receives the blood from the lungs and is pumped out into the body. The heart receives blood from veins and sends blood out through arteries.

