

THE CARDIOVASCULAR SYSTEM

of vessels waste flows role

A. The main of the cardiovascular system in the body is to transport oxygen to all the tissues in the body and remove, from the tissues, metabolic products. The system itself consists the blood, the medium for exchanging oxygen, nutrients and waste products throughout the body, the blood, the pipes through which the blood and the heart, the pump which forces blood to flow through the blood vessels.

pressure over diastole relaxes systole considered

B. What causes blood to flow through the vessels is blood Just as water flows through pipes from areas of greater pressure to lesser, so too the blood flows through the body from areas of higher pressure to areas of lower pressure. Blood pressure is measured both as the heart contracts, which is called, and as it, which is called A systolic blood pressure of 120 millimetres of mercury is right in the middle of the range of normal blood pressure, as is a diastolic pressure of eighty. In common terms, this normal measurement would be given as "120 80".

amount on by ventricles generally

C. Blood pressure depends many factors, including the of blood pumped by the heart. The diameter of the arteries through which blood is pumped is also an important factor., blood pressure is higher when more blood is pumped the heart, and the diameter of an artery is narrow. Systolic pressure is measured when the heart contract. Diastolic pressure is measured when the heart ventricles relax.

aorta four right lungs pulmonary great ventricle away atrium left

D. The heart is a-chambered organ with four main vessels, which either bring blood to or carry blood from the heart. The four chambers of the heart are: the right, the right, the left atrium, and the left ventricle. The vessels include the superior and inferior vena cava, which bring blood from the body to the right atrium. The artery which transports blood from the ventricle to the, and the, the body's largest artery that transports oxygen-rich blood from the ventricle to the rest of the body.

mitral valves tricuspid aortic pulmonary lungs

E. If you look carefully, you can see a series of one-way that keep the blood flowing in one direction. The blood first enters the heart at the right atrium. A contraction of the right atrium then forces blood through the valve and into the right ventricle. When the right ventricle contracts, the muscular force pushes blood through the valve into the pulmonary artery. The blood then travels to the where it receives oxygen. Next, it travels out of the lungs via the pulmonary veins, and travels to the left atrium. From the left atrium, the blood is forced through the valve into the critically important left ventricle. The left ventricle is the major muscular pump that sends the blood out to the body systems. When the left ventricle contracts, it forces the blood through the valve into the aorta. From there, the aorta and its branches carry blood to all the tissues of the body.