

# [Aandp discussion](https://assignbuster.com/ap-discussion/)

A & P Discussion - Answers Coronary artery disease (CAD) may lead to myocardial ischemia through loss of oxygen and nutrients being supplied to the myocardial tissue due to atherosclerosis wherein fatty or fibrous plaques made of cholesterol and other cellular waste products form and cause the lumen of the coronary arteries to narrow thereby decreasing the volume of blood flowing through these arteries which may fail to sustain the heart muscles with the necessary quantity and rate of blood when clogged. Myocardial Ischemia takes place whenever 5 liters of blood per minute reaches the heart chambers since this is not enough supply to be pumped in return to the rest of the systems and heart itself would require more than this figure to adequately function. The five-liter per minute blood flow indicates how the fatty materials have built up along the arterial walls that the volumetric blood rate becomes this low. (2) Immunosuppressive Disorder, otherwise known as immunodeficiency disorder, pertains to any condition that impairs the ability of a human body to combat infections as such disorder suppresses a natural response of the immune system to an antigen. Besides being genetically transferred, it may be acquired in the form as AIDS and one may obtain the virus responsible for it through sexual intercourse or transfusion with a contaminated blood or needles. This sensitive condition would normally require isolation of an immunosuppressive person for becoming increasing prone to infections. Health care environment may put the person to a higher risk of exposure to factors that worsen his situation since there are several other ill patients who possess contagious disease that may readily spread in the open and bring about different types of infections at varying degree. (3) G. I. tract primarily works to break down complex fatty, carbohydrate, and protein substances from the food eaten into a from which the bloodstream can feasibly carry and at this stage, the circulatory system proceeds to transport the nutrients, water, oxygen, as well as waste products to and from the billions of blood cells respectively. The oxygen-filled blood leaving the aorta travels to get the oxygen supplied throughout the bodily tissues and upon reaching the lungs, the blood receives oxygen in exchange of CO2 produced via cellular respiration process and this is the chief operation that the respiratory system performs. After nutrients and oxygen have been delivered to each tissue where nutrients as glucose can be simplified further for energy production, metabolic processes with glycolysis, Kreb’s cycle, and the electron-transport system enable conversion of the sugars or glucose into ATP having phosphate bonds which on breaking, emancipates the energy needed by the body. The exchange of gases facilitated by the respiratory system is very important for proper respiration or breathing whereas the other nutrients absorbed by the tissue each employs a characteristic job on promoting health as it renders each organ with distinct work to function well. Similarly, the energy released through ATP via aerobic respiration benefits muscles for fulfilling their contraction requirements. Works Cited “ Causes of Coronary Hear Disease.” 02 Feb 2011. http://www. wrongdiagnosis. com/c/coronary\_heart\_disease/causes. htm. 20 Jan 2011. Mayo Clinic Staff. “ Myocardial Ischemia.” 2011. http://www. mayoclinic. com/health/myocardial-ischemia/DS01179/DSECTION= causes. 21 Jan 2011. “ Immunosuppressive Disorder –Immunodeficiency Disorder.” 2003. http://www. medicineonline. com/articles/i/2/immunosuppressive-disorder/immunodeficiency-disorder. html. 22 Jan 2011. NDDIC. “ Your Digestive System and How It Works.” Apr 2008. http://digestive. niddk. nih. gov/ddiseases/pubs/yrdd/. 24 Jan 2011. “ The Respiratory System.” 18 May 2010. http://www. emc. maricopa. edu/faculty/farabee/biobk/biobookrespsys. html. 23 Jan 2011.