

# Pathophysiology - hyperlipidemia and hypertension

[Nutrition](#)



**ASSIGN  
BUSTER**

Pathophysiology - Hyperlipidemia and Hypertension 1. When the nurse explains the lab results to the patient, she will most likely provide the following information: Cholesterol is a soft, waxy substance that is found in the fats in your blood. It is produced in the liver and carried through your blood attached to proteins called lipoproteins. Cholesterol is essential for normal body function, however, if your cholesterol is too high it can increase your risk of heart disease. A blood test measures the level of the three main types of lipoproteins: - HDL (High Density Lipoprotein) is the "good" cholesterol. It protects your heart by removing excess cholesterol from the blood and taking it to the liver. You want this number to be high, at least 60. Less than 40 is considered low. Your level is 50 = borderline low. - LDL (Low Density Lipoprotein) is the "bad" cholesterol. It may form deposits on the walls of arteries and other blood vessels. You want this number to be low. Less than 100 is optimal and up to 129 is near optimal. Unhealthy levels are 130-159 (borderline high), 160-189 (high), and over 190 (very high). Your level is 180 = borderline high. - Triglycerides are the most common type of fat found in food and in the body. A high level of triglycerides may contribute to hardening the walls of arteries. You want this number to be low. Less than 150 is normal, between 150-199 (borderline high), 200-499 (high) and over 500 (very high). Your level is 250 = high. The total cholesterol level is determined by adding the numbers of the LDL and HDL. Less than 200 is best, between 200-239 (borderline high) and over 240 (high). Your level is 230 = borderline high. If both blood cholesterol and triglyceride levels are high, the risk of developing coronary heart disease rises significantly. 2. To determine the patient's risk factors for elevated lipids, the nurse should obtain the history of the following: - Family history of heart disease - Level of <https://assignbuster.com/pathophysiology-hyperlipidemia-and-hypertension/>

exercise - Diet: how much red meat, full-fat dairy products, saturated and trans fats - High blood pressure - Obesity - Diabetes - Smoking 3. The patient is considered in Stage 2 of hypertension. Although his Systolic number is in Stage 1, the Diastolic is in Stage 2 and the highest level of the two determines the stage. 4. To determine the patient's risk factors for elevated blood pressure, the nurse should obtain the history of the following: - Age - Race - Family history of high blood pressure - Obesity - Level of exercise - Tobacco use - How much sodium, potassium and vitamin D in diet - Alcohol consumption 5. The following lifestyle changes will positively impact both high blood pressure and hyperlipidemia: - Maintain a healthy weight - Eat healthy foods — less saturated fats, NO trans fats, lower sodium, whole grains, fruits & vegetables - Exercise regularly - No smoking or chewing of tobacco - Limit alcohol Sources Third National Report of the National Cholesterol Education Report [www. clevelandclinic. com](http://www.clevelandclinic.com) [www. mayoclinic. com](http://www. mayoclinic. com) [www. webmd. com](http://www. webmd. com)