

The cardiovascular system: factors that affect blood pressure

[Science](#), [Anatomy](#)



NAME: _ MAP Instructions: Select " Study Area (myA&P) Select " Interactive Physiology" (left tab)

Select " Chapter 19: Cardiovascular System - Factors that Affect Blood Pressure"

Click " Topic," watch the tutorial, and then answer the following questions.

1. What are the three main factors that influence total peripheral resistance (TPR)? a. Turbulence b. Vascular Resistance c. A change in blood viscosity

2. Name three hormones that act as vasoconstrictors. a. Epinephrine b. Angiotensin II c. Antidiuretic Hormone

3. Name two hormones that directly increase blood volume. a. Antidiuretic Hormone b. Aldosterone

4. Track the effect on blood pressure by reducing venous return. Go through all the steps. VR decrease in stroke volume (SV) --> decrease in cardiac output (CO) --> decrease in blood pressure (BP)

5. Categorize the following into: A. Factors which increase blood pressure B. Factors that decrease blood pressure _A___ arterial diameter_A___ total vessel length _B___ vessel elasticity_B___ plasma epinephrine _B___ blood volume_B___ plasma angiotensin _A___ stroke volume_A___ plasma ADH B___ blood viscosity_B___ parasympathetic stimulation _A___ blood volume_A___ sympathetic stimulation Use arrows in the spaces for questions 6 through 10.

6. A in hematocrit will result in ___ blood viscosity and ___ blood pressure.

7. Growth will result in ____ total vessel length and an ____ blood pressure.

8. Arteriosclerosis will result in ____ vessel elasticity and an ____ blood pressure.

9. Excessive sweating will result in a short term ____ in blood volume and a ____ in blood pressure.

10. An in epinephrine will result in ____ vessel diameter and an ____ in blood pressure.