

Bio390

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## **Atherosclerosis and Resistance**

Atherosclerosis is a common condition where arteries are narrowed by deposits of material termed plaque. If the flow of blood is to continue at its usual rate, a higher pressure is required. A consequence of atherosclerosis is elevated blood pressure. High blood pressure, in turn, has many undesirable effects, one of them being that the heart must work harder and less efficiently to circulate blood.

**Estimate the increase in blood pressure required to maintain normal cardiac output when the radii of the arteries in the systemic circulation are decreased by an average of 10%.**

ANS: \_\_\_\_\_