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Curriculum Units by Fellows of the National Initiative
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Cardiovascular Medications, Beta-Blockers and their Effect on Cells

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This unit is designed for students taking a biological science course. Cardiovascular medications are commonly found in the houses of a number of my students. Many times my students assume the responsibility of administering the medication to their parents and grandparents. I want my students to understand that all drugs entering the body can affect the cell. Lipid soluble molecules readily enter and leave the cell. This unit will identify one substance that will cause a constriction of red blood vessels. Students will examine this molecule and look at the class of drugs called Beta-blockers. Beta-blockers are given to individuals as a form of treating cardiovascular diseases. A large population of African Americans and Hispanics are smokers and suffer from diabetes. Many of these individuals are taking Beta-blocker medications. I want my students to understand how Beta-blockers work inside of the body. I want my students to learn how they can avoid taking these drugs later on in life by avoiding a certain lifestyle.

(Developed for Biology, grades 10-12; recommended for Biology, grades 10-12)