



# YALE NATIONAL INITIATIVE

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Curriculum Units by Fellows of the National Initiative  
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## **The Down-Low (DL) on High Blood Pressure**

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by Stephen Lewia

This two-week high school Anatomy and Physiology curriculum, designed for 10<sup>th</sup> through 12<sup>th</sup> graders, aims to give students a deep understanding of the anatomy, physiology, and pharmacology of high blood pressure (hypertension). The premise of this unit is to teach students in such detail that they feel as comfortable as a clinician creating a diagnosis. To do this, background information is provided at a level that leaves teachers with in-depth knowledge of the topic. The purpose of this detail is to enable teachers to answer most questions posed by their students. Activities within this unit solidify the underlying goal of students having a clinical understanding of hypertension. These activities, broken down into unit long (called chronic activities) and day long (called acute activities) time frames, teach and challenge students through inquiry-based learning. Students will evaluate vital signs, visually identify and research medications commonly used to treat hypertension, connect discussed topics through the creation of mind webs, and experiment with the physics of blood flow and vascular resistance. Students will complete this unit with a strong understanding of hypertension, and how they can make positive and negative impacts toward their potential of having this future diagnosis.

(Developed for Anatomy and Physiology, grades 10-12; recommended for Anatomy and Physiology, and Biology, High School grades 9-12)

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