



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
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Microbiomes in and on Our Bodies

Guide for Curriculum Unit 14.04.09
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The purpose of this unit is to provide information to fellow teachers of environmental science – in middle and high school – about biological hazards to human health. Specifically, one danger is that we are becoming a "super clean" society that could be putting all of us at a health risk.

In this curriculum unit, students will develop an understanding of ecosystems – called microbiomes – that exist in and on our bodies, and also learn how technology has evolved whereby scientists can build machines on the scale of nanometers in order to better immunize people and fight diseases, possibly finding a cure for many of the autoimmune diseases such as lupus and multiple sclerosis. In focusing on microbiomes in and on our bodies, students will learn proper oral and body hygiene, which becomes critically important for students to learn at this age of puberty.

Activities for students will include their taking a personal inventory of the foods that they eat, what products they use to wash their hands with, what products they groom their bodies with, and learn what alternatives they can choose in order to protect themselves from destroying "good" bacteria that can aid in fighting off pathenogenic bacteria both inside and on their bodies. Students will research to discover where the majority of microbiomes exist in and on their bodies.

(Recommended for Science, grades 6 and 7)

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