Food Pesticides and Their Risks to Children

Guide for Curriculum Unit 96.02.06
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Pesticides are chemicals used in agriculture to protect crops from insects and other pests. Although progress seems to have been made in pest control, the quality of human health is on the decline, and children especially may be at risk. While there are many science issues being studied in relation to a child’s vulnerability to pesticides (i.e. poor renal function, CNS/Immune system abnormalities and malfunctions, cancer susceptibility), concerns regarding the current pesticide policy for both children and adults are also growing.

Consumers have been made aware of these issues and the substances found in and on their foods; however, the magnitude of this in terms of potential long term effects does not seem to be realized, particularly in urban settings. Our children, more importantly, need to be made aware of the potential health hazards their food may have.

This unit is written with fourth and fifth graders in mind and will allow them to discover and identify common chemical pesticides used on food. They will also learn how these manmade substances disturb the natural environment. By the end of this unit, students will be able to identify some of the sprays that have been found on fruits and vegetables and measure the water quality in their community. The processes by which these chemicals get into our foods will be researched as well and they will discuss ways in which changes can be made.

(Recommended for Ecology, Health, and Environmental Science, grades 4-5)