



Demonstrating Susceptibility

Based on Tox-in-a-Box™: Appendix A, developed by the Community Outreach and Education Program at the University of Washington

Presenter's Guide

Supply List

1. Small glass vase
2. Large glass vase
3. Food coloring
4. Spoon
5. Instructions

*To make this more visually engaging, you could use two vases with small necks and a magazine cutout of a toddler and an adult head taped to the smaller and larger one respectively.

Instructions

1. Fill the two vases almost $\frac{3}{4}$ full of water and place in clear view of all participants.
2. Set the Scene: Imagine that the vases are the bodies of an adult and a small child. Ask the group how much of us is water (70%). Have them imagine that the food coloring is a chemical they are getting exposed to.
3. Have a volunteer from the group add three drops of food coloring to each of the vases and then stir them with the spoon. Ask the participants what happened to cause this response.
4. The smaller vase, which represents the small child, will be a much darker shade of food coloring compared to the plastic cups. Point out to the participants that the same amount of chemical (food coloring) had a much greater effect on the small child (small vial) than on the adult (large cup). Suggestion: you can also use beakers of two different sizes – 100ml and 500ml or 10ml and 100ml beakers to show the difference.
5. After you are done with the demonstration, discuss how the activity relates to the following:
 - a. dose-response
 - b. individual susceptibility

Clean-up

Rinse out your cups and leave them on the table when you are done.