**How Acid Affects Teeth Demonstration**

Supplies: 2 jars, ½ cup apple juice or more, ½ cup vinegar or more, 2 eggs or some chalk (not dustless chalk)

Concept: Acid dissolves calcium. The teeth are made of calcium. Acid will dissolve the teeth in places. This is called dental caries. Sugar is turned into acid just like apple juice is turned into vinegar by microbes in the environment. Bacteria/microbes on the teeth turn sugar into acid which causes tooth decay.

Demonstration: Place apple juice and one egg into a jar. Place vinegar and egg into another jar. Notice the immediate reaction (vinegar starts to dissolve egg.) Let sit for 3-5 days and look at eggs. The apple juice did not dissolve the egg but the vinegar did.

Disscussion: The teeth are made of calcium like the egg. Acid will dissolve your teeth just like it dissolved your egg. Sugar in your mouth gets turned into acid if it sits there.

To keep your teeth healthy, you should not eat sugary or starchy foods that turn into acid in the plaque on your teeth very often or you should brush or clean your mouth often to remove plaque and neutralize the acid.

Crackers: pass out crackers and let each kid chew one until it starts to be sweet in his mouth. This demonstrates how starches turn into sugar in the mouth.

Combine with Big Tooth demonstrations and Good Food demonstrations