SUPER FAB LAB INVESTIGATION:

Digestion Investigation

Episode: Special Mom Day Meal
Cycle: Human Body

Purpose (What We’re Going to Explore and Learn)

• As part of our exploration of digestion, we’re going to make a model of a stomach.
• Then we'll put some food into our "stomachs" to observe what happens when our bodies break down food so that we can use the nutrients from it.

Materials (The Stuff We Need)

• Zip-top freezer bags - be sure to use strong ones to avoid a mess
• Lemon juice
• Crackers

Procedure (What to Do)

1. Pour some lemon juice into the plastic bag. The juice will be the "strong liquid" that breaks down the food. It is an acid that works like the acids we have in our real stomachs. You'll need enough to cover the cracker. About a half cup should do it.
2. Break the cracker into a few pieces. This is sort of like chewing it.
3. Put the cracker into the bag and zip it up, while pushing out excess air.
4. Now shake the cracker in the lemon juice. You can use your hands to squeeze it, too. This is like the action of the muscles that cause our stomachs to squeeze food during digestion.
5. Describe what's happening to the cracker as your "stomach" digests it.

Other Stuff You Might Want to Know or Do

• Even though kids are GREAT at pretending that bananas are phones or blocks are cars, they sometimes have trouble understanding the relationships between models and real things. Although our plastic bag stomachs are very simple models of stomachs, we can help children understand them better by being clear about the relationships between our real and pretend stomachs. Be sure to repeat that the bag is a pretend stomach sort of like the stomach in our bodies, the lemon juice is like the very strong liquids in our stomachs, and our hands work like the muscles that squeeze our real stomachs.
• On the show we talk a bit about where the food goes after it leaves our stomachs. If your child wants to know more, check out a body book at the library or look on the internet to research the answer together.