**pH probe study: Acid reflux test**

A pH probe is a study of the acid levels in your child’s esophagus. It helps healthcare providers see if your child has acid reflux and figure out how best to treat it.

**Why does my child need a pH probe study?**

Your child may need a pH probe study if you think they have gastroesophageal (GAS-tro-ee-soff-uh-JEE-al) reflux disease, or GERD. Also called acid reflux, GERD is a disease where stomach acid pushes back up into the esophagus. It can make your child’s esophagus sore and make them vomit. If the stomach acid gets into the mouth or lungs, it can cause breathing problems, hoarseness, or lung infections.

A pH probe can confirm whether your child has GERD. It lets the healthcare provider see whether reflux increases or decreases when your child changes positions. The healthcare provider can also decide whether medicine would help or what treatment would be most helpful.

**What does pH mean?**

A pH test measures a substance for acid and gives it a number from 1 (very strong) to 7 (very weak). A substance rated 7 on a pH scale is very low in acid and is considered a neutral. During a pH probe, a machine will measure the pH levels in your child’s esophagus to see how much acid is there.

**How do I prepare my child for a pH probe study?**

Ask your child’s healthcare provider about any medicine your child takes, especially reflux medicine. Your child may need to stop taking their medicine 1 week before the pH probe study. They should not eat or drink anything 1 hour before the test.

**What happens during a pH probe study?**

- A healthcare provider will put a tiny tube, called a probe, in your child’s nose and down to their esophagus. They will take an x-ray of your child’s throat to make sure the tube is in the right spot.
Your child may cough, sneeze, or gag for a few minutes while getting used to the probe. Help your child relax by soothing them with a calm voice and a soft touch. This will keep the probe in place. If it comes out, a healthcare provider will have to put it back in.

- The probe is attached to a small monitor that measures pH levels in the esophagus every 30 minutes and records them. Your child will drink unfiltered apple juice, which has a pH of 4. The esophagus’ pH is usually 6–7. If the probe detects a pH of 4 or less in the esophagus, it means stomach acid from the apple juice has backed into the esophagus.

- Your child will drink every 4 hours. Reflux is expected during the first 2 hours, not the second 2 hours. The healthcare provider will tell your child how much they need to drink. If they can’t drink enough, they may need a feeding tube for the rest of the test.

- The pH probe will monitor your child’s esophagus for 24 hours, so your child must stay overnight. They can wear the monitor on their shoulder in its holster and play quietly or watch TV while it records pH levels. Your child can also sleep with the monitor. Ask the healthcare provider whether your child can have solid food and take any medicine during the pH probe study.

- Your child’s healthcare provider will record the numbers from the monitor. They will write down whether your child is crying, coughing, or vomiting.

**What happens after the pH probe study?**

After 24 hours, your child’s healthcare provider will remove the probe, and your child can go home. They can eat and drink as usual, but they may have a sore throat or feel tired after the test. The healthcare provider will call you to talk about the results of the pH probe study in a few days.