BURP TEST

Much easier than invasive and expensive laboratory testing for <u>adequate</u> <u>stomach hydrochloric acid</u> is the good old baking soda challenge. Quite simply, baking soda in water is taken on an empty stomach (after at least a 10-hour over-night fast), and the subject awaits an uncontrollable BURP. This test is probably as reliable as the Heidelberg test. When sodium bicarbonate reacts with hydrochloric acid in the stomach it produces water, sodium chloride, and carbon dioxide. --- The carbon dioxide is belched up. The simple chemical equation is:

$$NaHCO_3 + HCl \rightarrow NaCl + H_2O + CO_2$$

Why does this simple test work? Most people (including most doctors) do not realize that a healthy stomach, even when empty, is <u>extremely acid</u>. In fact, the normal stomach has a pH below 2, and ideally very close to 1 at all times when it is empty. So, adding baking soda to an empty stomach should yield a burp within a few minutes.

For the test, a person must be fasting for at least 10 hours. The patient drinks ½-½ tsp. of baking soda in 4-6 oz. of cold water, then times how long until the big burp, or a series of small burps. People with normal acidity and normal quantity of stomach contents will belch within 2 or 3 minutes. Those with normal acidity but high fluid content will burp sooner. Those with low stomach acid will not burp for 4 or 5 minutes, and those with rather marked hypochlorhydria will never burp.