

Oral pH Monitoring

Evaluate the pH of saliva to determine the level of acidity in the mouth. Acid is produced by oral bacteria and carbohydrates. There are several factors that may influence acid production, including diet, eating habits, dehydration, smoking, poor oral hygiene, and excessive plaque build-up. If the mouth is continuously exposed to acid production, demineralization occurs. This process may lead to the erosion of tooth enamel, dental caries, or eventually periodontal disease (a chronic bacterial infection).

Saliva maintains and protects a healthy oral environment by providing a buffering action against acids and promoting remineralization.¹ The buffering capacity of saliva is limited and can be overpowered by frequent or long-term exposure to acids. Low salivary flow, due to a medical condition or a certain drug therapy, may also result in a decrease of the buffering action.² Monitoring the oral pH helps identify an acidic condition, thus promoting awareness and early detection of an unhealthy oral environment. Improving the oral condition may help reduce the factors that destroy tooth enamel.

1. Tenovo J. ed. Human Saliva: Clinical Chemistry and Microbiology, vol. 1, Boca Raton: CRC Press; 1989:44-59. 2. Gudmundsson K. et. al. Tooth erosion, gastroesophageal reflux and salivary buffer capacity. Oral Surgery, Oral Medicine and Oral Pathology 1995;78: 185-189.

Directions

Monitor oral pH first thing in the morning, 2 hours after meals, or prior to brushing in the evening:

- · Tear off about 1 inch strip of pH paper
- · Expectorate (spit) saliva into a cup
- · Moisten strip of test paper with saliva
- Compare with color chart on dispenser
- · Determine salivary pH level

For In-Vitro Use Only

Phenaphthazine paper pH range 4.5 - 7.5 Use 1 inch per patient, 180 inches = 180 uses Dispenser contains a 15 ft. (4.57 m) roll and color chart Product #0283-0074-97

pH Range	4.5-5.5	6.0-6.5	7.0	7.5
Color	Yellow- Green	Green- Blue	Dark Blue	Deep Purple
Level of Acidity	Very Acidic	Slightly Acidic	Neutral Healthy	Slightly Alkaline

