

# Periotron 8000



Periotron 8000 is a micro-moisture meter electronic instrument that has been designed to measure gingival crevicular fluid, periodontal pocket fluid, salivary flow and saliva thickness. Measurement values are sent over a serial link to a PC running the PERIO program. This program allows the operator to capture and display a data base of Periotron readings that can be graphed, printed or exported to many of the most popular spreadsheet, word processing or graphic presentation packages available today.

## Why measure GCF and what is the significance?

Inflammation of the gingiva, usually referred to as gingivitis, arises in the region of the crevicular epithelium well before any inflammation is clinically visible.

This is sometimes referred to as clinically invisible gingivitis. As the severity of inflammation rises so does the level of GCF. In most cases, the inflammation spreads to the marginal gingiva and the gingivitis becomes clinically evident. Visual and tactile methods are used almost universally by periodontists, hygienists and general practitioners alike to assess visible gingivitis on a severity scale. The most common scale is that of Loe-Silness (Periodontal disease in pregnancy. I. Prevalence and severity. Acta Odontologica Scandinavica 21: 533, 1963). Usually referred to as the Loe-Silness Index, this ranges from 0 to 3 where zero is no visible gingivitis, and one is mild, two is moderate and three is severe **gingivitis**.

Gingival inflammation can now be measured electronically and as a result, assessed more accurately (see below). Because of the high correlation between gingival inflammation and GCF flow (Borden et al., The effect of age and sex on the relationship between crevicular fluid flow and gingival inflammation in humans. Journal of Periodontal Research 12: 160, 1977), this provides a diagnostic method that has several advantages. One is that measurements are objective, and a patient has a number or numbers which they can relate to, just like the blood sugar levels in a diabetic patient. Second, values obtained are not different for different examiners. Third and most importantly, one can measure invisible gingivitis. Fourth, one can assess when the gingivitis and bacterial activity is of sufficient severity that periodontitis (loss of epithelial attachment, pocket development and loss of supporting bone) is likely to ensue.

### **Accessory of Periotron 8000**

#### **Periotron Professional 3.0**

A software program that performs rapid conversion of Periotron Scores to volume ( $\mu$ I) and Sialo Scores to saliva film thickness ( $\mu$ m) measurements on tooth or oral mucosa surfaces. Also includes patient tracking with charting. For Windows 98. Me. 2000 and XP



#### PerioCol Paper Strips

For collecting larger volumes (0 - 2.0 µl) of GCF fluid. Package contains 10 sterilized strips.



#### SialoPaper Strips

For minor salivary gland collection and oral mucosal wetness measurements. Each strip collects 0 -  $3.0~\mu$ l. Package contains 10 sterilized strips



## PerioPaper Strips

Special paper strips that absorb or carry 0 - 1.2  $\mu$ l of fluid. Used with all Periotron models. Box contains 20 sterilized packets. Each packet contains 16 test strips.

