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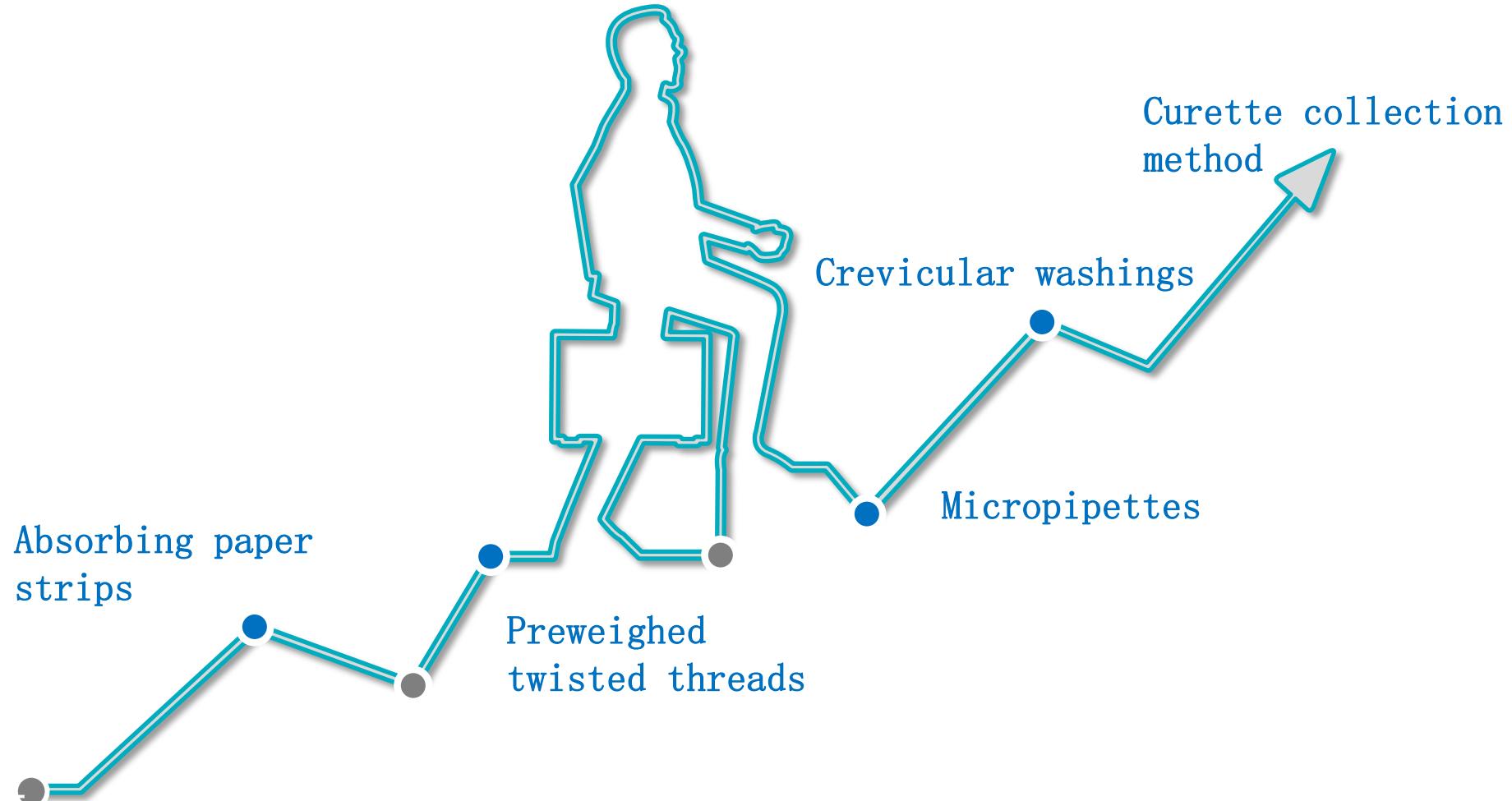
# Methods of Collection of GCF

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# GCF

## Methods of GCF



## ➤ Absorbing paper strips



Filter paper strips were used to collect GCF by inserting the strips into the crevice (apical direction) until mild resistance was detected or by inserting the strips at or over the entrance of the pocket for 30 sec.

- Quick and simple to utilize.

## Advantages

- It can be applied to singular locales.

- The procedure itself delivers a level of aggravation of the crevicular epithelium that expands the creation of gingival crevicular liquid

## Disadvantages

GCF tests are typically debased by blood, spit, or dental plaque and their essence influences the precision in volume assurance and organization of GCF.

➤ **Preweighed twisted threads**



The threads are placed in the gingival crevice around the tooth, and the amount of fluid collected is estimated by weighing the sample threads

GCF

➤ Micropipettes



Capillarity



Standard



centrifuged



Gingival  
vasculature



- Larger volume can be collected

## Advantages

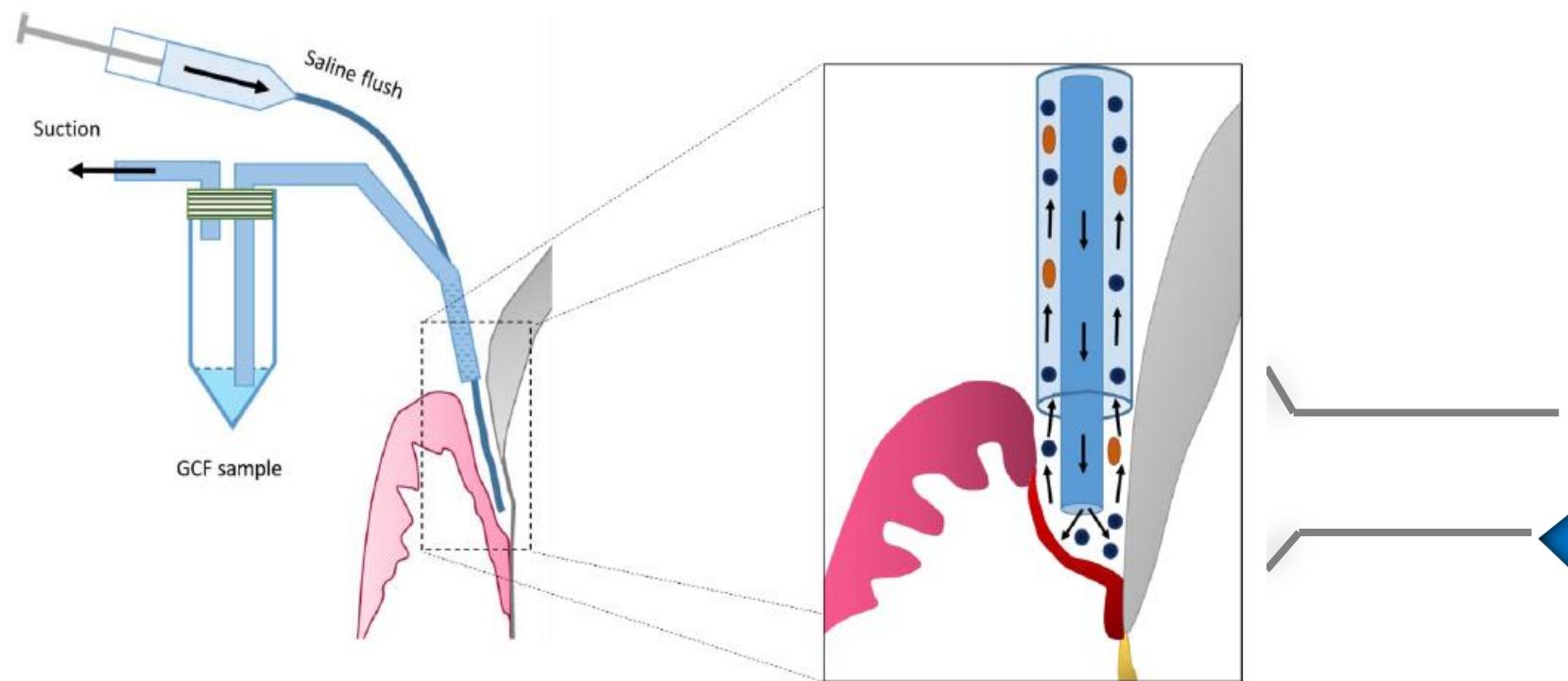
- It provides an undiluted sample of native GCF whose volume can be accurately assessed.

- Time consuming
- It would also require more effort from the clinician

## Disadvantages

- Difficulty of removing complete sample from the tubing

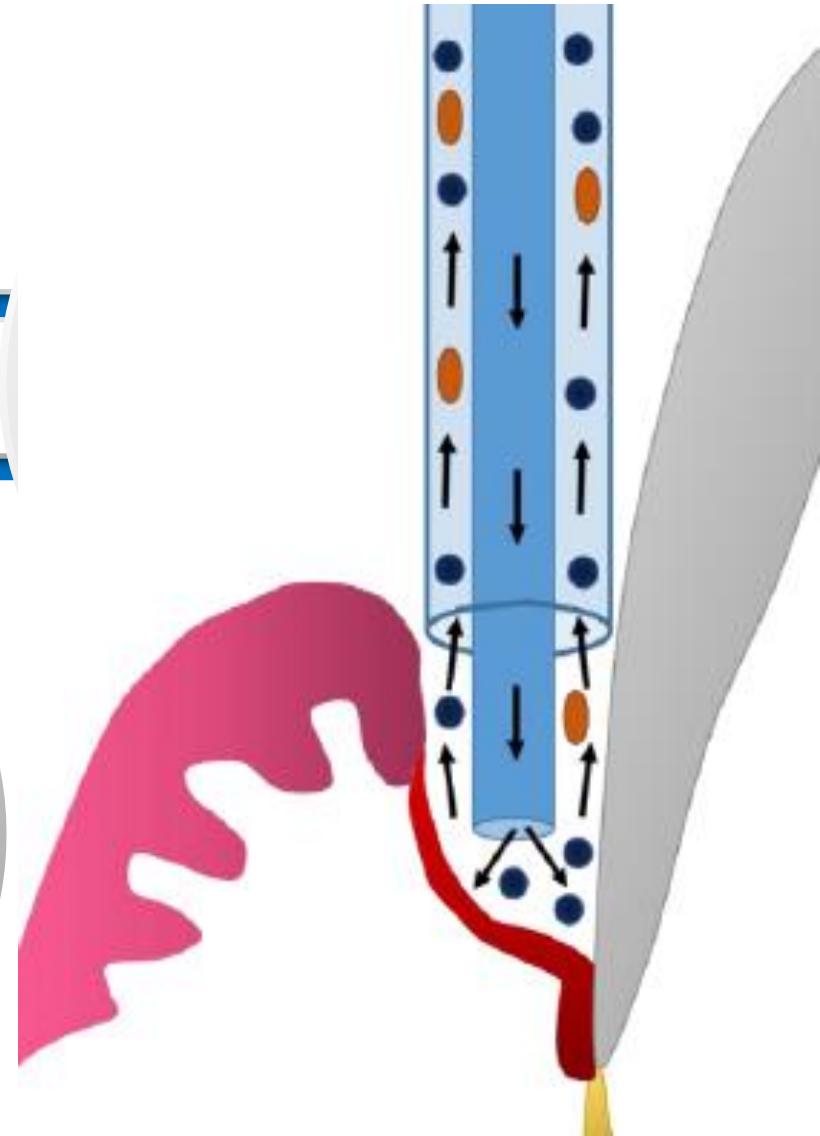
## ➤ Gingival crevicular washings



**The Gingival sulcus is perfused with an isotonic solution of fixed volume. Several methods of GC washing are available**

# GCF

- 1 10  $\mu$ l of Hank' s balanced salt solution at the interdental papilla.
- 2 construction of a customized acrylic stent that isolates the gingival tissue. irrigated with a saline solution, using a peristaltic pump
- 3



- Qualitative appraisal

## Advantages

- Valuable for gathering cells and microscopic organisms from the gingival hole.

- GCF from singular destinations can't be examined.
- High pace of blood contam. because of gingival aggravation.

## Disadvantages

- Complicated construction of acrylic stents.
- dilution factor cannot be determined



## ➤ Curette collection method

- Isolation. Cleaning by rubber cup and paste.
- First, a paper point is embedded down to the base of the pocket and left there for ten seconds
- Afterwards, a Gracey curette is tenderly embedded into a similar site of the pocket and further subgingival biofilm was gathered
- The following material was cleared off on another sterile paper point.

## Advantages

- Quick and simple to utilize

## Disadvantages

- The measure of gathered liquid is incredibly little.
- GCF tests are generally defiled by blood, saliva, or dental plaque

The fluid volume on the strips can be quantified by a number of ways:

**1**

## Staining

with a protein disclosing dye such as ninhydrin at 0.2% and 2%. The stained area can be measured by using a magnifying device such as a graded microscope



**2**

## Weighting

before collection within a scaled microcentrifugation plastic tube and the weighing was repeated immediately after collection in the same microtubule.



**3**

## Periotron

This electronic device measures the changes in capacitance across the wetted strip. This change is converted into a digital readout



# GCF

**04**

**Periotron 8010**



measure gingival crevicular fluid, periodontal pocket fluid, salivary flow and saliva thickness.

**03**

**Periotron 8000**



Difference in calibration fluid composition is reflected in the periotron scores

Calibration seems to be consistent over a 1 w interval

- Relatively unaffected by qualitative difference in the fluid
- Ability to quantitatively measure the GCF without permanently altering it

**02**

**Periotron 6000**



Considerably sensitive to qualitative difference in the fluid

**01**

**Periotron 600**



GCF



ANY QUESTION