

GC Tri Plaque ID Gel™



# It's PLAIN to see

A NEW PERSPECTIVE ON BIOFILMS



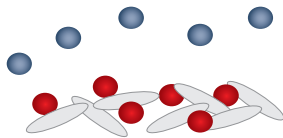
GC ASIA DENTAL PTE LTD

# Introducing GC Tri Plaque ID Gel™

An innovative plaque disclosing gel that identifies new, mature and acid producing biofilms

How does it work? GC Tri Plaque ID Gel contains sucrose and pigments (blue and red) that are able to penetrate and stain the plaque biofilm

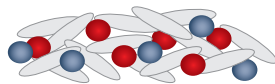
● Blue pigment ● Red pigment ● Sucrose ● H<sup>+</sup> Acid ○ Bacteria



## New plaque

When a plaque biofilm is sparse, the blue pigment is easily washed off.

PINK / RED



## Old plaque (>48hr)

When a plaque biofilm has matured, its structure is dense, so both the blue and red pigments are trapped.

BLUE / PURPLE



↓ Into low pH



## Extra high risk plaque

The sucrose in GC Tri Plaque ID Gel will be metabolised by any acidogenic bacteria within the plaque biofilm. The resulting acid produced lowers the plaque pH (<pH 4.5) and this makes the red pigment disappear.

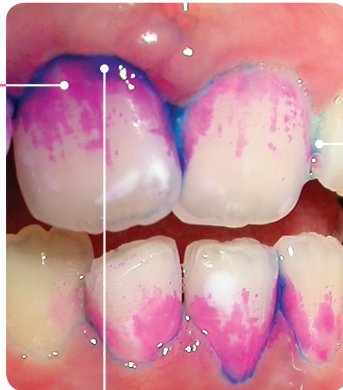
LIGHT BLUE

## Helping your patients to see in 3 dimensions

### PINK / RED

A thin deposit of plaque will stain pink/red. These are areas where surfaces have been cleaned recently and the biofilm is immature.

Prof L.J. Walsh



### LIGHT BLUE

Areas that are light blue indicate acid production from the plaque bacteria and the biofilm will have a pH of approximately 4.5 or lower. This is a high risk biofilm.

### BLUE / PURPLE

Thick deposits of plaque will stain blue/purple. These are areas which have not been cleaned in the past 48+ hours and a complex biofilm has developed. This thick plaque is a cause of gingivitis.

# Practice notes - Prof Ian Meyers

## Patient dialogue – application

### Fast application

GC Tri Plaque ID Gel is gently applied with a swab, micro brush or cotton pellet



The area is gently washed with water spray, with HV suction



*“This plaque disclosing gel will not only tell us where there is plaque on your teeth, but also it will provide some information on how long that plaque has been there and if it is likely to damage your teeth.”*

*“I am going to swab an area of your teeth with this blue dye and then wash it away. The dye will only stain where there is plaque and it is easily removed, so you won't leave today with dye all over your teeth and gums.”*

*“Can you see the colours on your teeth? This shows where the plaque is and where you have missed some areas when cleaning your teeth.”*

*“I find placing the dye on specific locations and rinsing off with the triplex works best for me. It is very comfortable for the patient and they do not need to rinse and spit and watch all the blue dye coming out of their mouth. It also reduces the risks of the blue dye staining the lips/clothes etc and tends to be slightly quicker ... but this is my preference and it is very easy to do full arch and whole mouth applications.”*

*Prof Ian Meyers*

## Patient dialogue – results

*“The pink/red areas are where the plaque is still thin and probably only developed recently, probably over the last 24 hours.”*

*“The blue/purple areas are where the plaque is thicker and this means it has been there longer and had a chance to build up. This happens in areas where you might have missed cleaning for a longer period and in hard to reach areas. We often see this close to the gum line and between the teeth.”*

*“However I am most concerned about the areas that appear light blue as these are areas where the plaque is starting to produce acids and this can damage your teeth. This is quite mature plaque and the longer it stays there, the greater the risk of breakdown of the enamel – and it could result in a cavity in your tooth.”*

## Immediate results



Prof Ian Meyers

# Clinical observations



A patient with significant plaque build-up at the contact point for a partial denture



A 30-year old male with high caries activity and multiple posterior carious lesions

*"We are using a new dye, which can now also show the 'worst' acid-producing plaque (the light blue colour). This light blue plaque shows where the decay on your teeth is already starting, it even happens between your teeth."*

Images and text – courtesy Dr Andrew Brostek



*"A 46-year old female presents with some thick plaque adhering to calculus on the lingual of the lower posterior teeth."*



*"As only the pink/red and blue/purple colours emerged, it suggests thicker and older plaque, but no acid producing plaque, as would possibly be the case where calculus is present."*



*"After removing the plaque and calculus, the gingival displacement is obvious, but the enamel looks very sound. Thus in this case we discussed the gingival and periodontal implications being of greater concern than enamel demineralisation."*

Images and text – courtesy Prof Ian Meyers

# Returning biofilms to health

GC Tooth Mousse and GC Tooth Mousse Plus are water based topical cremes containing RECALDENT™ (CPP-ACP) and are ideal products for returning biofilms to health.

Follow routine oral hygiene procedures with daily application of GC Tooth Mousse or GC Tooth Mousse Plus to:

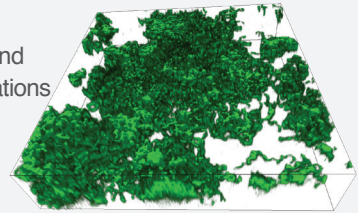
- reduce plaque acid production\*
- reduce the level of cariogenic bacteria\*
- increase calcium and phosphate levels in plaque\*
- increase plaque pH\*



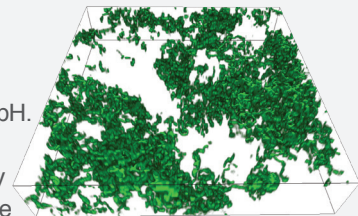
\*For specific clinical study details refer to A World of Proof. Research studies from around the globe  
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RECALDENT™ (CPP-ACP) mechanism of action:

- CPP-ACP particle size is  $\leq 2$  nanometer and is able to penetrate biofilms.
- Increasing the calcium and phosphate ion concentrations in plaque increases the degree of saturation with respect to apatite and therefore depresses demineralisation.
- Both the CPP and the phosphate ions are effective acid buffering agents.
- Bacterial degradation of CPP releases ammonia, which increases plaque pH.
- CPP alters bacterial composition of plaque by preventing the adherence and colonisation of specific cariogenic bacteria.
- CPP-ACP will bind free fluoride ions and transport these into plaque, providing a very efficient delivery mechanism for increasing fluoride ion concentration in plaque.



Confocal scanning laser microscope image of cariogenic *Streptococcus mutans* biofilm



After a 10min treatment with 1% CPP-ACP, the *Streptococcus mutans* biofilm exhibited a 72% reduction in volume

Oral Health CRC, University of Melbourne  
[www.oralhealthcrc.org.au](http://www.oralhealthcrc.org.au)



## GC Tri Plaque ID Gel™

40g tube (36ml)

3-year shelf life



## PLAQUE-CHECK GEL BR

For patient home use

Pack of 5 x 5g tube

3-year shelf life



## GC Tooth Mousse

Assorted Pack 10 pcs, 2 of each flavour  
(Melon, Strawberry, Tutti-Frutti, Mint & Vanilla)

Strawberry, Pack of 10 pcs

Vanilla, Pack of 10 pcs

40g tube (35 ml)



## GC Tooth Mousse Plus

Assorted Pack 10 pcs

4 x Mint, 4 x Strawberry & 2 x Vanilla

40g tube (35 ml)



GC Tooth Mousse and GC Tooth Mousse Plus contain RECALDENT™ (CPP-ACP), a unique ingredient developed at The School of Dental Science, The University of Melbourne, Victoria, Australia. RECALDENT and RECALDENT Device are trademarks used under licence. GC Tooth Mousse should not be used by people with milk protein allergies. If any allergic reaction occurs, this may indicate sensitivity to the benzoate preservatives, or to some other component of the product. In this event, discontinue use of the product and contact your physician.

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