NEW

GC TOOTH MOUSSE PLUS

INTRODUCING

GC TOOTH MOUSSE PLUS – WITH FLUORIDE

MAKING A GREAT IDEA EVEN BETTER!

Tooth Mousse Plus is an exciting addition to the GC range of easy-to-use topical products for in-surgery and at-home dental care. It contains a unique, patented form of fluoride in a product designed for high risk patients. It has all the benefits, ease of use, and great taste of GC Tooth Mousse, but with enhanced remineralizing capabilities. No wonder it's called Tooth Mousse Plus.

NOW YOU HAVE TWO OPTIONS TO PROVIDE PREVENTIVE CARE FOR YOUR PATIENTS:

+ Regular Tooth Mousse in all five flavours.
+ New Tooth Mousse PLUS in strawberry, mint and vanilla flavours.

+ All the benefits of Tooth Mousse *and* fluoride for enhanced remineralizing

REGULAR OR PLUS?

USE REGULAR TOOTH MOUSSE

- After tooth whitening
- For pregnant mothers
- For children under six
- During and/or after orthodontics
- For desensitizing
- To provide extra protection for teeth

USE TOOTH MOUSSE PLUS

+ For white spot lesions
+ For pregnant mothers
+ During and/or after orthodontics
+ For desensitizing
+ For medically compromised patients
+ For patients with acidic oral environment
+ For erosion and gastric reflux
+ For patients with poor plaque control
+ For high caries risk patients
+ To provide extra protection for teeth

FLUORIDE AND CPP-ACP

Prof. Eric Reynolds, University of Melbourne

Fluoride ions promote the formation of fluorapatite in the presence of calcium ions and phosphate ions. This is now believed to be the major mechanism of the fluoride ion's action in preventing tooth decay. However, fluoride ions can only promote remineralization of tooth enamel with fluorapatite if enough salivary or plaque calcium and phosphate ions are available when the fluoride is topically applied. Hence, on topical application of fluoride ions, the availability of calcium ions and phosphate ions are the limiting factor for net enamel remineralization to occur (Ten Cate, 1999). Tooth Mousse Plus provides a superior form of fluoride ions as it also contains CPP-ACP. Tooth Mousse Plus therefore contains bioavailable calcium ions, phosphate ions and fluoride ions. CPP-ACP plus fluoride has been shown to increase fluoride's uptake into plaque and subsurface enamel and substantially increase subsurface enamel remineralization in situ with fluorapatite relative to fluoride alone, by providing bioavailable calcium ions, phosphate ions and fluoride ions in the correct molar ratio to form fluorapatite. **Reynolds 1998, Reynolds et al 2006**

REFERERENCES:

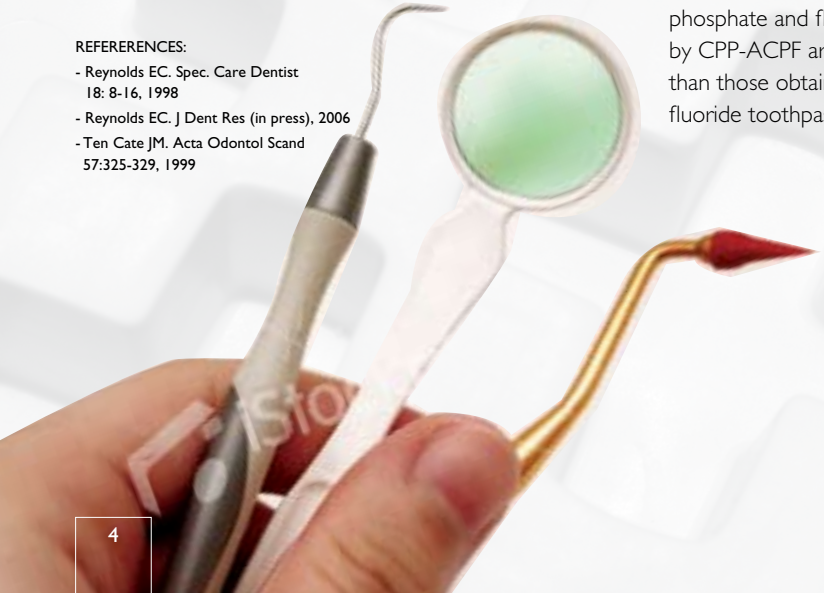
- Reynolds EC. Spec. Care Dentist 18: 8-16, 1998
- Reynolds EC. J Dent Res (in press), 2006
- Ten Cate JM. Acta Odontol Scand 57:325-329, 1999

WHY ADD FLUORIDE TO TOOTH MOUSSE?

Prof. Laurie Walsh, University of Queensland

Because Tooth Mousse Plus exhibits significantly greater anti-caries properties than its fluoride content alone, it is a superior product for professional application or at-home use. CPP-ACPF (Tooth Mousse Plus) gives greater anti-caries effects than CPP-ACP (Tooth Mousse), and is designed for patients at high risk for dental caries and dental erosion. Even though the pH of Tooth Mousse Plus is above 7.0, it enhances mineral uptake without encouraging the formation of calculus.

The mechanism of anti-cariogenicity for CPP-ACPF involves elevating levels of calcium, phosphate and fluoride ions at the tooth surface and within dental plaque, thereby depressing enamel demineralization and enhancing remineralization. The increases in supragingival plaque levels of calcium, phosphate and fluoride ions produced by CPP-ACPF are markedly greater than those obtained with 1000ppm fluoride toothpastes.



HOW MUCH FLUORIDE IS IN TOOTH MOUSSE PLUS?

Tooth Mousse Plus contains 900 parts per million (ppm) fluoride ions, a level just below that found in normal adult-strength toothpastes (1000ppm). While the remineralizing actions of the fluoride ions are well known, Tooth Mousse Plus with ACPF releases fluoride as well as calcium and phosphate ions, thereby providing all the three ions which are required for formation of acid-resistant fluorapatite. This level of fluoride also exerts some effects on the utilization of sugars as an energy source by dental plaque bacteria, which reduces their overall contribution to plaque fermentation.

HOW DOES IT COMPARE TO FLUORIDE RINSE OR VARNISH?

Fluoride rinses contain between 200 and 900ppm fluoride, while varnishes contain between 22,600 and 25,000ppm fluoride. These can be effective preventive agents in patients with enhanced risk, but normal salivary function.

CPP-ACPF has been shown to be superior to fluoride alone in promoting fluoride uptake into plaque and enamel in people with normal salivary function. Further, CPP-ACPF promotes the remineralization of subsurface enamel with fluorapatite in the body of the lesion, not just at the surface layer like fluoride alone. Patients with salivary dysfunction (dry mouth) show a great propensity to mineral loss and typically lack sufficient bioavailable calcium ions for effective remineralization when fluoride is used in isolation. Using a product such as Tooth Mousse Plus which releases bioavailable calcium as well as phosphate and fluoride ions can help to provide effective remineralization even in more challenging situations where salivary parameters are abnormally low. It boosts salivary levels of these ions in a form equally well suited to in-office professional and at-home use.

HOW TO APPLY IT?

Just like Tooth Mousse, Tooth Mousse Plus is applied topically to at-risk surfaces. This can be done by first cleaning the teeth and then smearing a small amount of Tooth Mousse Plus across the tooth surfaces with a clean finger or cotton-tipped applicator. When applied immediately before bed, the material is then left in place, to dissolve slowly overnight. It is not rinsed out.

Tooth Mousse Plus can also be applied topically to the teeth using a custom-made tray such as a pull-down tray made for applying a whitening gel.

IS IT SAFE TO USE IN CHILDREN?

Because Tooth Mousse Plus contains a level of fluoride similar to that of adult strength toothpastes, there are issues when the material is ingested either accidentally or deliberately in children because of their low birth weight. Ingestion of a pea-size amount (0.5mL) of Tooth Mousse Plus will contribute 0.45mg of fluoride ion to the daily fluoride intake. In young children (up to six years of age), use of Tooth Mousse Plus is contraindicated because it may increase the risk of dental fluorosis. Children aged six years and above can use both standard (adult strength) toothpaste (1000ppm) and Tooth Mousse Plus without an increased risk of dental fluorosis.

A simple way of describing Tooth Mousse application, and remembering to do it immediately before bed, is to describe it to children as a 'blanket for the teeth'.

WHAT ABOUT PREGNANT MOTHERS?

There are no proven dental or general health benefits or risks from pre-natal fluoride-containing products. Fluoride supplements are not indicated in pregnancy, however Tooth Mousse Plus can be used as a topical treatment in high caries risk pregnant women or in situations where reflux is causing dental erosion and dentinal hypersensitivity.

WHEN TO USE TOOTH MOUSSE PLUS RATHER THAN TOOTH MOUSSE?

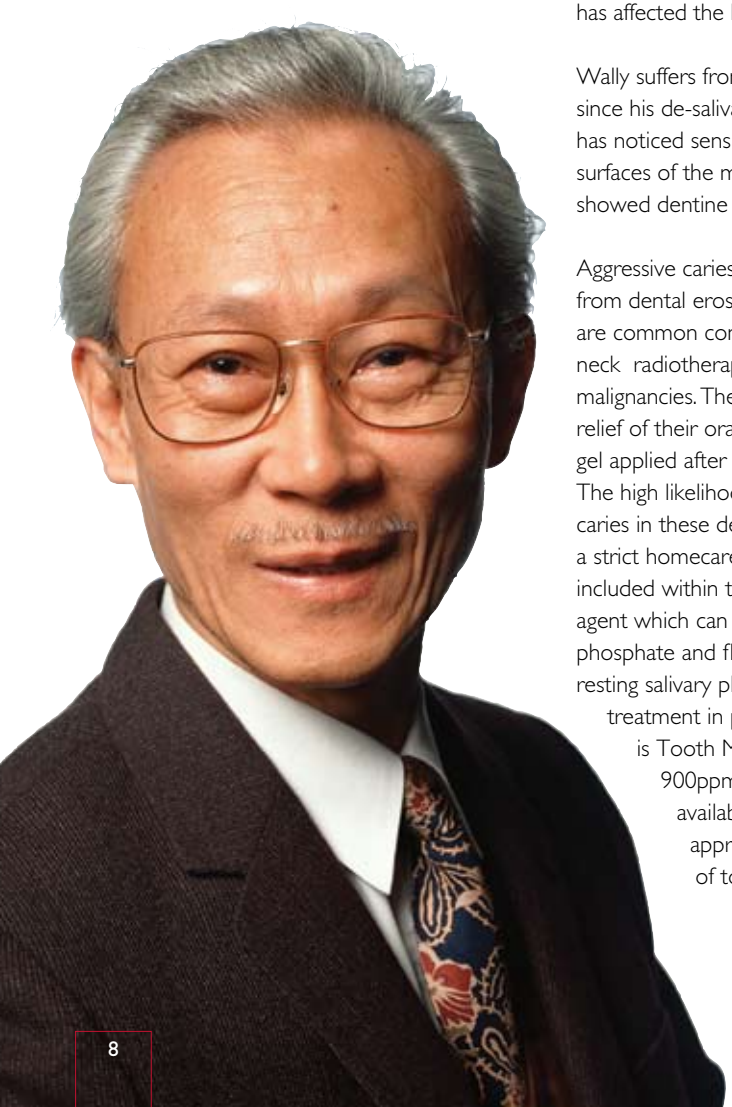
Tooth Mousse Plus is recommended at night when a dentate patient has marked salivary dysfunction (dry mouth), for example, because of medications, systemic illnesses, or salivary gland disease, because of the enhanced risk of mineral loss from dental caries or dental erosion. These patients would also benefit from daytime applications of GC Dry Mouth Gel to gain symptomatic relief from oral dryness. Patients should be at least six years of age before using Tooth Mousse Plus.

Regular Tooth Mousse, which is fluoride-free, is the appropriate product to use in infants and young children (up to six years of age) because of issues with fluoride ingestion.

The unique CPP-ACPF (amorphous calcium phosphate and fluoride) complexes in Tooth Mousse PLUS were developed at The University of Melbourne School of Dental Science.

TOOTH MOUSSE PLUS FOR HIGH CARIES RISK AND SPECIAL NEEDS PATIENTS

WALLY IS 60-YEARS-OLD and twelve months ago was diagnosed with a low-grade squamous cell carcinoma on the posterior lateral margin of the tongue. This was linked to his lifetime habits of heavy smoking, and a high intake of alcohol. Following the removal of his mandibular molars, Wally underwent a course of head and neck radiotherapy which produced a useful result.



It nevertheless left him effectively de-salivated and since that time, he has suffered from a profound reduction in salivary output, both at rest and upon stimulation. His dentition is now showing significant areas of demineralization, and these are recurring in a cervical and ring-barking pattern. A major contributor to tooth structure loss has been dental erosion from the low salivary pH. This has affected the labial surfaces of the incisor teeth.

Wally suffers from mild gastric reflux disease, and since his de-salivation from radiation therapy, he has noticed sensitivity developing on the palatal surfaces of the maxillary incisor teeth which showed dentine exposure from erosion.

Aggressive caries and loss of tooth structure from dental erosion and accelerated tooth wear are common complications following head and neck radiotherapy for oral and nasopharyngeal malignancies. These patients require symptomatic relief of their oral dryness, e.g. using dry mouth gel applied after each meal, and before retiring. The high likelihood of dental erosion and dental caries in these de-salivated patients makes a strict homecare protocol mandatory, and included within this should be a remineralizing agent which can deliver all the requisite calcium, phosphate and fluoride ions despite a depressed resting salivary pH. The appropriate topical treatment in patients in this group therefore is Tooth Mousse Plus which contains 900ppm fluoride in addition to bio-available calcium and phosphate in the appropriate ratio for remineralization of tooth structure.

TOOTH MOUSSE PLUS FOR SPECIAL NEEDS PATIENTS

Wally has marked loss of cervical tooth structure and incisal tooth wear which is due to his altered salivary environment.

There is little saliva present even after several minutes of chewing.

The palatal surfaces show the classical pattern of reflux-induced erosion.

A different radiotherapy patient, showing radiation-induced caries with marked caries involving the incisal and buccal surfaces.

Yet another patient showing typical aggressive caries following radiotherapy.

Marked destruction of incisal surfaces.

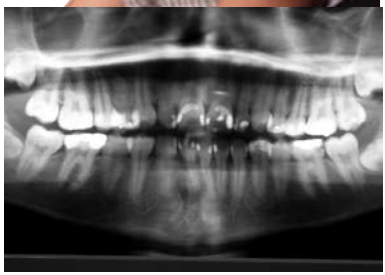
Loss of sheets of buccal enamel is a common event due to structural changes caused by radiotherapy at the dentin-enamel junction.

MEET MUM TO BE JULIA

JULIA IS A 20-YEAR-OLD hairdresser whose presenting complaint was enhanced gingival bleeding following toothbrushing from the majority of her teeth. She also noticed gingival swelling occurring around the maxillary incisor teeth, and that these swollen areas appeared to be the most hemorrhagic. Julia has a moderately restored dentition, and previously had numerous incisor restorations for caries. She is an irregular flosser, and until twelve months ago, was smoking one to two packets of cigarettes per day.

Julia recently underwent a pregnancy test and this was found to be positive. A salivary test revealed a dramatically depressed buffer capacity of the stimulated saliva. However, the pH of the stimulated saliva was normal. This apparent anomaly correlates with the possibility that the salivary changes and gingival changes are due to pregnancy. Given her high caries rate in the past, enhanced prevention during the period of pregnancy would be very worthwhile, since it is during this time that alterations in salivary flow and changes in the buffering capacity of saliva may make her oral environment more conducive towards dental caries. If nausea develops during the first trimester of pregnancy, this will increase the risk of tooth structure loss from dental erosion.

An appropriate preventive agent for use at night before bed is GC Tooth Mousse Plus which can deliver fluoride, calcium and phosphate in the correct ratio for remineralization of enamel. The casein phosphopeptide can also provide buffering of plaque acids and by elevating levels of calcium in dental plaque fluid can reduce plaque acid production through fermentation.



OPG Xray. Julia struggled with caries throughout her teenage years.

Enhanced gingival inflammation is a common finding in early pregnancy.

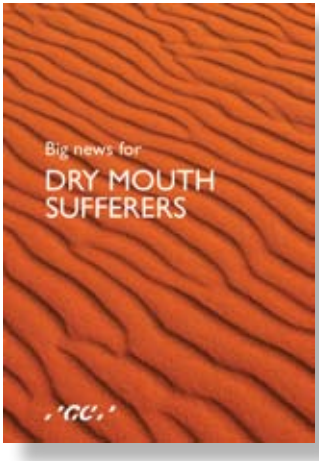
Resting pH (left) is depressed but stimulated pH is normal (right). A depressed buffer capacity is commonly seen in early pregnancy.

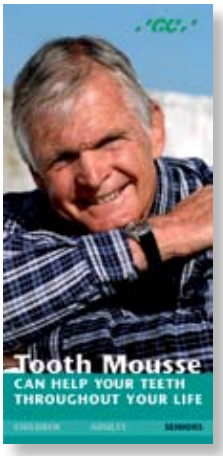
DECALCIFICATION DURING ORTHODONTIC WORK CHANGED SHANNON'S OPINION

SHANNON IS 15 YEARS OLD and has been concerned about the appearance of her teeth. She is currently reaching the mid-point of her orthodontic treatment, and her orthodontist has begun to notice small white areas appearing around the brackets. This orthodontic decalcification is due to the changes in levels of cariogenic bacteria which occur routinely following placement of fixed orthodontic appliances. In order to preserve Shannon's smile, the introduction of an effective remineralizing treatment in the form of GC Tooth Mousse Plus is warranted so that the areas of decalcification are arrested, and the enamel lesions can reverse leaving the labial enamel appearance completely normal.

At the end of her orthodontic treatment Shannon had a vastly improved smile line without decalcified enamel being evident.

ASK FOR COPIES OF THESE PATIENT BROCHURES FROM YOUR DENTAL DEALER





GC Asia Dental Pte. Ltd
Changi Logistics Centre
19 Loyang Way #06-27 Singapore 508724
Tel 65 + 6546 7588 Fax 65 + 6546 7577
www.gcasia.info

Recaldent GC