

HYPERSENSITIVITY

sensitive care



HYPERSENSITIVITY

Colgate®

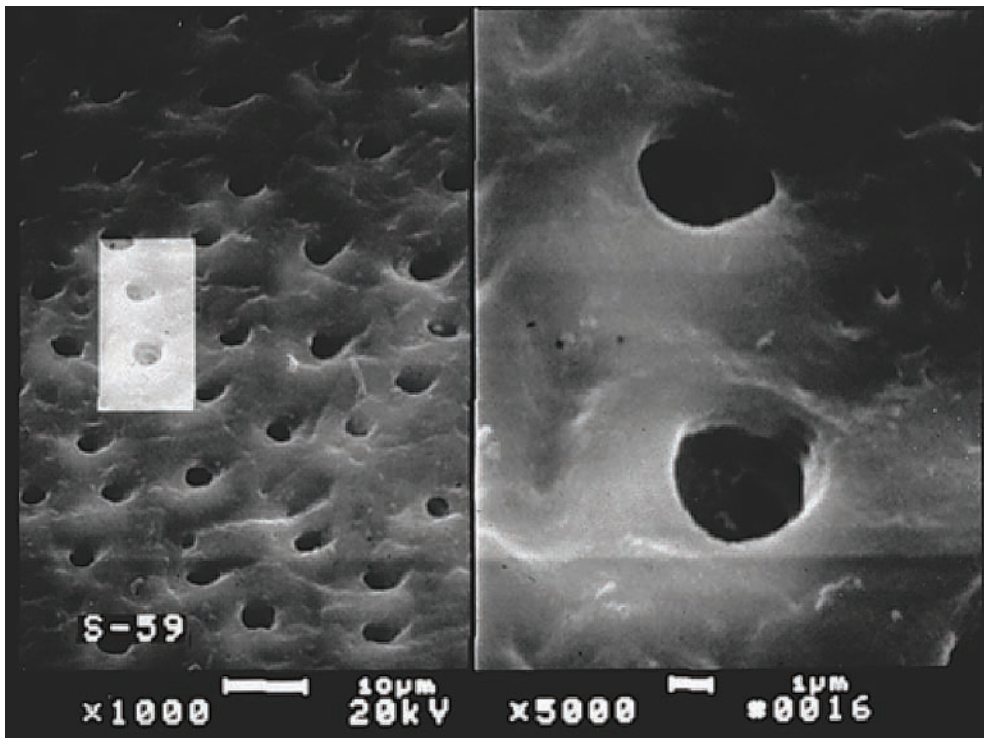
YOUR PARTNER IN ORAL HEALTH

www.colgate.com.au

The prevalence of dentine *hypersensitivity* is high



- 1 out of 4 adults experience sensitivity.¹
- 39% of people with dentine hypersensitivity do not use any desensitising products because they do not like the taste.²



Sensitive teeth have more open and enlarged tubules³

¹ Schiff T et al. a randomized clinical trial of the desensitizing efficacy of three dentifrices. *Compend Contin Dent Educ* 2000; (21) supplement No 27: 4-10.





² Consumer Insight research, data on file, Colgate-Palmolive Ltd.

³ Absi EG et al. Dentine hypersensitivity. A study of the patency of dentinal tubules in sensitive and non-sensitive cervical dentine. *J Clin Periodontol.* 1987; 14(5):280-4.

HYPERSENSITIVITY



Colgate offers

-  Over 50 years of continuous clinical research in oral health
-  Comprehensive product range to prevent and treat the most common dental problems
-  Wide experience in the field of hypersensitivity
-  Highly efficient products for in office treatment, at home treatment and everyday use

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Colgate Hypersensitivity Range

IN OFFICE TREATMENT

AT HOME TREATMENT



FOR EVERYDAY USE

HYPERSENSITIVITY

IN OFFICE TREATMENT



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Products for *office* treatment

Colgate Duraphat®

Fluoride Varnish
5% w/v Sodium Fluoride Varnish

- Immediate and long lasting relief
- Proven desensitiser for both thermal and tactile pain
- Quick and easy application, sets on contact with saliva
- Caries protection



Indications

Ideal for patients with acute and severe dentine hypersensitivity:

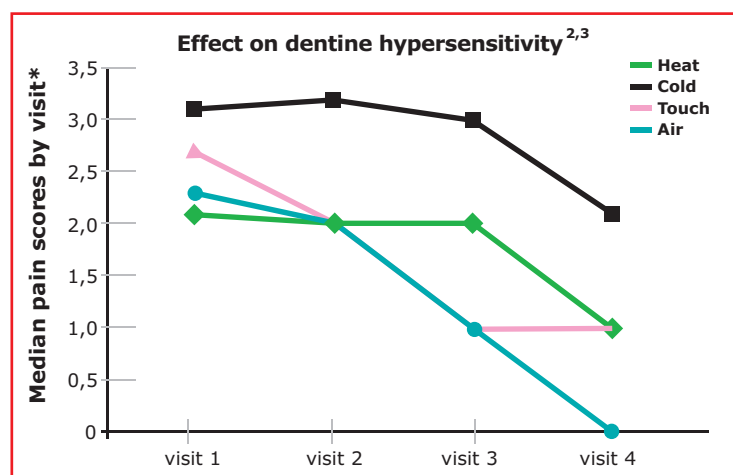
- Severe sensitivity due to dental procedures i.e. Scaling and Root Planing
- Temporary sensitivity after restorative treatment
- Ideal for patients with early signs of root caries

Mode of action Immediate occlusion of dentinal tubules by fluoride varnish

Active ingredient 22,600 ppm fluoride from sodium fluoride (NaF)

Clinical results^{1,2,3}

Colgate Duraphat Varnish is effective in reducing dentinal hypersensitivity: Patients with mild to severe dentin hypersensitivity received 3 Duraphat applications over 21 days (1 application per visit).²



1 Ritter AV et al., Treating cervical dentin hypersensitivity with fluoride varnish. JADA 2006; 137:1013-20

2 Papas AS, Clark R.E: Accrued desensitization with repeated Duraphat treatment of hypersensitivity: J Dent Res 74 (Special issue): 134, 1995

3 Gaffar A. Treating hypersensitivity with fluoride varnishes. Compend Contin Dent Educ 1998; 19:1089-97

* Pain measured according to S-Point Malzack/McGill Pain Scale

HYPERSENSITIVITY

AT HOME TREATMENT



HYPERSENSITIVITY

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Products for *home* treatment

Colgate Gel-Kam

Home Care Gel

Effective fluoride treatment for sensitivity relief and cavity protection if used daily:

- Relief of painful tooth sensitivity (thermal and tactile)¹
- Low abrasive gel
- Caries protection



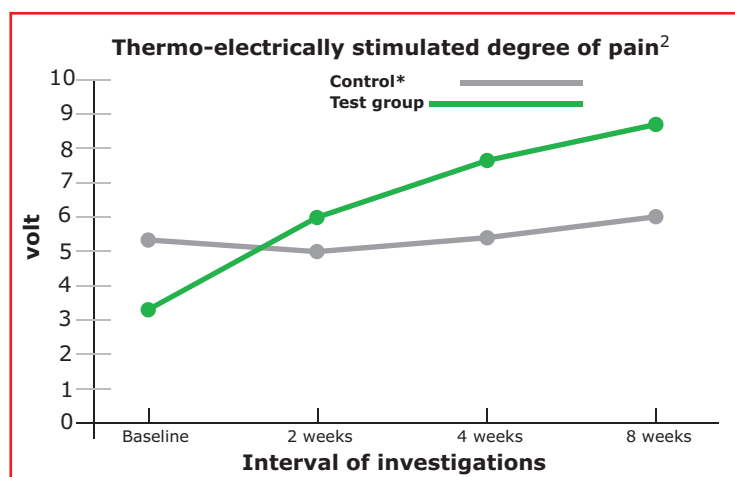
Indications Ideal for patients with chronic dentine hypersensitivity and for caries control

Mode of action Stannous ions precipitate to occlude tubules

Active ingredient 0.4% stable stannous fluoride (SnF_2), 1,000 ppm fluoride

Clinical results^{1,2,3}

Colgate Gel-Kam with 0.4% SnF_2 is an effective agent in reducing dentinal hypersensitivity when used twice a day over a period of at least two weeks



*Gel without stannous fluoride

1 Blong MA et al.: Effects of a gel containing 0.4 percent stannous fluoride on dentinal hypersensitivity. Dental Hygiene 1985; 489-492.

2 Thrash WJ et al.: Effect of a fluoride solution on dentinal hypersensitivity. Am. J. Dent. 1992; 5: 299-302

3 Snyder RA et al.: The efficacy of a fluoride solution on root surface hypersensitivity. J. Dent. Res. 1985 (Special Issue); 64: 201 (abs.237)

HYPERSENSITIVITY



FOR EVERYDAY USE

HYPERSENSITIVITY

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Products for **everyday** use

Colgate Sensitive

Multi-Protection Toothpaste

All-round protection for people with dentinal hypersensitivity:

- Relief from hypersensitivity^{1,2}
- Caries and plaque³ protection
- Great taste, important for compliance
- Improves gum health



Indications

Ideal for prevention and control of mild and moderate dentinal hypersensitivity, due to exposed dentine, with regular use

Mode of action

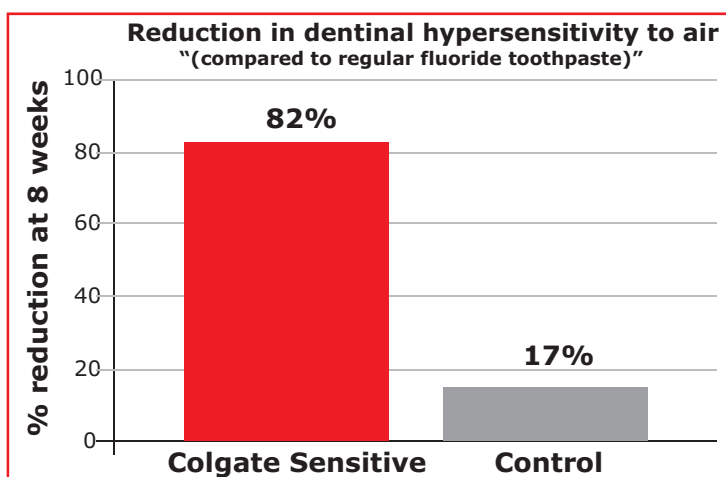
Potassium ions desensitise the dental pulp nerve fibres of the tooth and prevent nerve stimulation. Zinc citrate and pyrophosphate protect against plaque and calculus^{3,4} improving gum health

Active ingredient

Potassium citrate 5.5%, zinc citrate 2.0%, pyrophosphate 2.4%, 1,000 ppm fluoride from sodium monofluorophosphate

Clinical results

Colgate Sensitive Multiprotection is proven to provide unbeatable hypersensitivity relief.² The active ingredient, potassium citrate, has been shown to reduce dentinal hypersensitivity by up to 82% after 8 weeks use.¹



1 Date on file. Reduction in dentine hypersensitivity in an 8-week, randomised, double-blind study comparing potassium citrate to a control. Colgate-Palmolive Ltd.

2 Data on file. A 4 week hypersensitivity study comparing Colgate SENSITIVE Multi-Protection and SENSODYNE Total Care F Toothpaste. Colgate-Palmolive Ltd.

3 Williams C, McBride S, Mostler K et al. Efficacy of a dentifrice containing zinc citrate for the control of plaque and gingivitis: a 6-month clinical study in adults. *Compend Contin Educ Dent* 1988; 19(2), Spec issue: 4-15.

4 Petrone M, Lobene RR, Harrison LB et al. Clinical comparison of anti-calculus efficacy of 3 commercially available dentifrices. *Clin Prev Dent* 1991;13: 18-21.

HYPERSENSITIVITY

Products for *everyday* use

Colgate 360° Sensitive

Toothbrush

- Less wear¹
- Softer bristles²
- Superior cleaning³



Indications

Ideal for patients with exposed dentine and dentinal hypersensitivity

Product characteristics

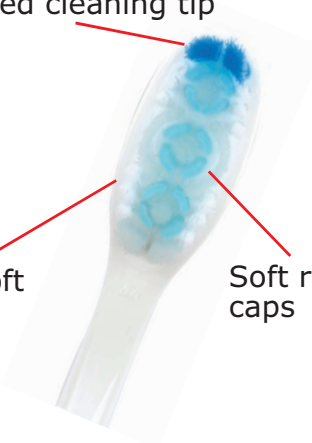
Soft textured tongue and cheek cleaner



Raised cleaning tip

Ultra soft tapered bristles

Soft rubber caps

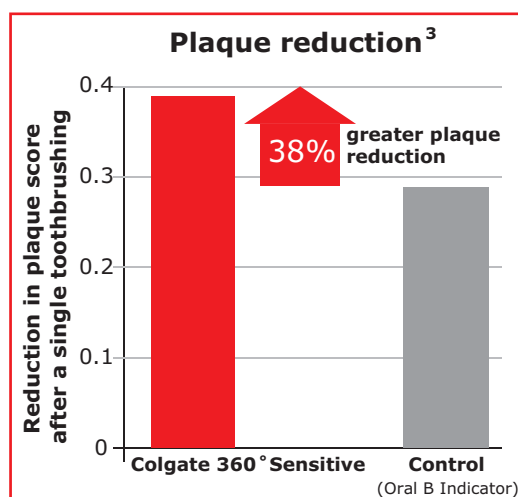


Clinical results

Ultra soft bristles: 48% softer bristles than a leading soft manual toothbrush.²

Superior cleaning: clinically proven to remove up to 38% more plaque than a leading soft manual toothbrush.³

Less wear: unique rubber cups, together with soft bristles, result in less wear on exposed root surface¹ compared with a soft flat trim toothbrush.



¹ Standard laboratory testing of dentin abrasion versus Oral-B®P-40 Indicator® Soft. Hefferen J et al., University of Kansas, 2006. Data on file, Colgate-Palmolive Ltd.

² Standard laboratory testing of bristle stiffness versus Oral-B® Indicator® Soft. Data on file, Colgate-Palmolive Ltd.

³ Nathoo S et al., New Jersey Dental School, UMDNJ, 2006. Data on file, Colgate-Palmolive Ltd. Removal after a single brushing. Oral-B® Indicator® is a trademark of Gillette Canada, Inc.

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Products for Hypersensitivity

Product	For office treatment	For home treatment	For everyday use	For everyday use
Hypersensitivity conditions	Ideal for patients with acute and severe dentine hypersensitivity, e.g. due to dental Scaling and root planing or restorative treatment	Ideal for patients with chronic dentine hypersensitivity	Ideal for prevention and control of mild and moderate dentine hypersensitivity due to exposed dentine with regular use	Ideal for patients with exposed dentine and dentine hypersensitivity
Mode of action	Immediate occlusion of dental tubules	Stannous ions precipitate to occlude tubules	Potassium citrate provides clinically proven sensitivity relief	Soft bristles for gentle, proven cleaning Soft textured tongue and cheek cleaner
Product benefits	<ul style="list-style-type: none"> ✓ Immediate relief ✓ Proven desensitizer for both thermal and tactile pain ✓ Quick and easy application, sets on contact with saliva ✓ Caries protection 	<ul style="list-style-type: none"> ✓ Relief of painful tooth sensitivity (thermal and tactile)² ✓ Low abrasive gel ✓ Caries protection 	<ul style="list-style-type: none"> ✓ Relief from hypersensitivity^{3,4} ✓ Protection against plaque⁵ and calculus ✓ Improves gum health ✓ Caries protection 	<ul style="list-style-type: none"> ✓ Superior cleaning¹ ✓ Softer bristles ✓ Less wear compared with a soft flat trim toothbrush
Active ingredients and content of fluoride	22,600 ppm fluoride as sodium fluoride (NaF)	1,000 ppm fluoride as stable stannous fluoride (SnF)	Potassium citrate 5.5%, zinc citrate 2%, pyrophosphate 2.4%, 1,000 ppm fluoride as monofluorophosphate (MFP)	Diameter of bristles: 0.15mm and 0.125mm
Recommended dosage and usage	2-3 applications within a few days interval	2 x daily over 2 weeks, in addition to brushing with Colgate Sensitive Multi-Protection Toothpaste, in case of severe sensitivity	2-3 x daily, ideally with Colgate 360 Sensitive Toothbrush	2-3 x daily, with emphasis on correct brushing technique

1. Nathoo S et al., New Jersey Dental School, UMDNJ, 2006. Data on file, Colgate-Palmolive Ltd. Removal after a single brushing. Oral-B® Indicator® is a trademark of Gillette Canada, Inc
 2. Blong MA et al.: Effects of a gel containing 0.4 per cent stannous fluoride on dentinal hypersensitivity Dental Hygiene 1985; 489-492
 3. Data on file. Reduction in dentine hypersensitivity in an 8-week, randomised, double-blind study comparing potassium citrate to a control. Colgate-Palmolive Ltd
 4. Data on file. A 4 week hypersensitivity study comparing Colgate SENSITIVITY Multi-Protection and SENSODYNE Total Care F Toothpaste. Colgate-Palmolive Ltd
 5. Williams C, McBride S, Mostler K et al. Efficacy of a dentifrice containing zinc citrate for the control of plaque and gingivitis: a 6 month clinical study in adults. Compend Contin Educ dent 1988; 19(2), Spec issue: 4-15

Clinical efficacy of **Colgate Duraphat**[®] Fluoride Varnish

A.S. Papas* and R.E. Clark* :

Accrued Desensitization with repeated Duraphat Treatment of Dentinal Hypersensitivity

In: Journal of Dental Research 74 (Special Issue): 134 (abstract No. 983), 1995

* Tufts University School of Dental Medicine, Boston, MA U.S.A.

Study objective

The objective of the study was to determine the extent and course of progressive desensitization that might accrue from multiple applications.

Trial conditions & methods

Product under investigation

Duraphat[®] varnish with 5% NaF (Colgate-Palmolive Inc.).

Study subjects

Thirty-one patients with moderate-to-severe dentinal hypersensitivity.

Methods

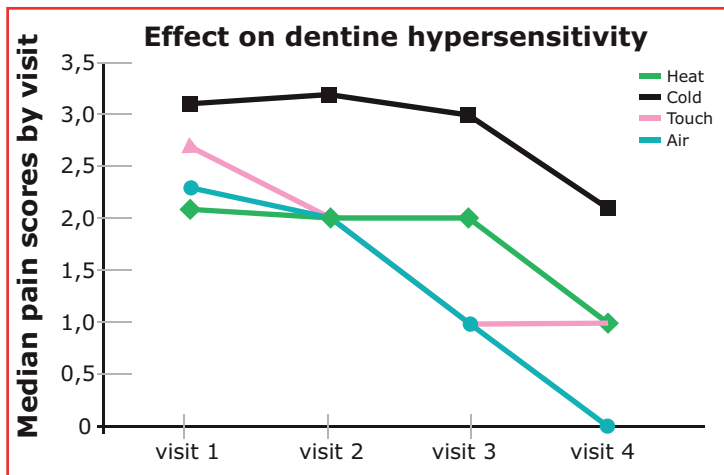
In this open study, all thirty-one patients with moderate-to-severe dentinal hypersensitivity were topically treated once weekly for three weeks. In all subjects discomfort was induced over five seconds by: rapid inhalation/exhalation with clenched teeth, brushing with dry, hard bristles, rinsing with hot (145°F) and with cold (35°F) water. The individual sensitivity was measured according to the Melzack/McGill Pain Scale. The pain scores were obtained before and after each treatment and one week after the last. As statistical analyses Friedman 2-way ANOVA by Rank was supplied.

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Results

Desensitisation was found to be progressive and nearly linear over the test period. The statistical analyses indicated significant pain reduction over four visits.

(Heat: $P = 0.002$; Cold: $P = 0.0002$; Brushing: $P = 0.0001$; Air: $P = 0.0001$)



Conclusion

Duraphat[®] is safe and effective as a dentinal desensitizer in multiple applications. The findings are consistent with former results obtained with single applications of Duraphat[®]. They are also consistent with expected tubule obturation by accumulating CaF₂-like globules on dentinal surfaces as previously described in SEM studies of this product's cariostatic mechanism.

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Patient Information: Sensitive Teeth



***What you should know
and what you can do***

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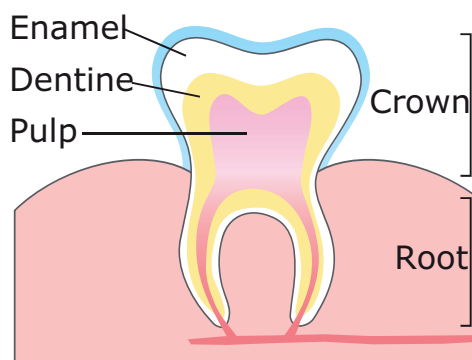
What's a tooth? What is Dentine Hypersensitivity?

Teeth consist of the visible crown and the invisible root, which are formed by three distinctive structures, called enamel, dentine and pulp.

Many adults suffer from sensitive teeth (or dentine hypersensitivity)¹. This condition is common when enamel covering the crown of the tooth is worn away to expose dentine or when the root surfaces of teeth are exposed.

The main core of the tooth (dentine) consists of many tubules running from the outer edge of the tooth dentine to its inner centre, which contains the tooth nerve. These microscopic tooth tubules contains fluid which moves when exposed to cold, heat or high sugar concentrations in the mouth and in turn stimulate the nerve and cause pain and discomfort.

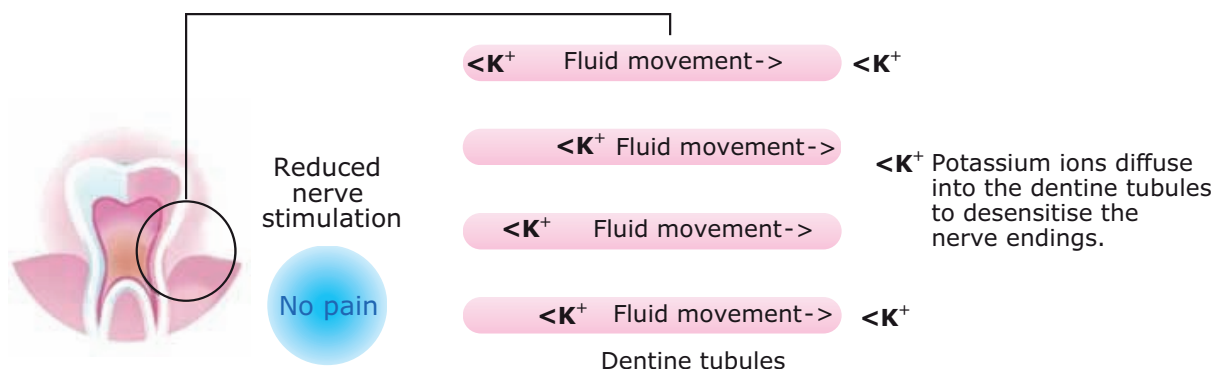
Enamel covers the crown and is the hardest tissue in the body
Dentine constitutes the major part of the tooth and gives teeth their colour
Pulp is rich in nerves and blood vessels



How can *Colgate Sensitive* help?

Colgate Sensitive contains Potassium Citrate which soothes the nerve ends and provides effective relief from tooth sensitivity by its direct desensitising effect on the tooth nerve.

With regular use, Colgate Sensitive provides long-term sensitivity protection.



¹ Schiff T et al. a randomized clinical trial of the desensitizing efficacy of three dentifrices.

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My teeth are sometimes sensitive. Is this common?

Yes. Many adults experience occasional sensitivity to cold, sweet or hot food and beverages.¹

Evidence shows as more people keep their natural teeth for longer, the problem of sensitive teeth is increasing.¹ The main causes are increases in gum recession and toothbrush abrasion due to inappropriate brushing techniques.

Exposed necks of teeth are more vulnerable to temperature changes. In addition, excessive acidic food and fizzy drinks can erode the tooth surface and cause dentine hypersensitivity.

Regardless of the triggers and frequency of your pain, let your dentist or hygienist know. In the first instance they will ensure no other factors are contributing to the sensitivity and they can recommend the appropriate treatment.



Gum recession exposes the roots of teeth, which are less insulated against cold food and beverages

How long does it take to get relief?

Clinical data indicates that there should be a noticeable difference after four weeks of daily use. Individual sufferers will notice an improvement at different rates. Other factors which can impact relief include: diet, brushing habits and type of toothbrush used.

Is it recommended to use a particular toothbrush?

Yes. Tooth sensitivity can be caused by tooth surface abrasion and recession of the gums. A hard bristled toothbrush can worsen both, so many dentist recommend the use of a soft bristled toothbrush.

Colgate Sensitive toothbrush is specifically designed for use with Colgate Sensitive toothpaste to prevent abrasion and help relieve sensitivity without compromising effective plaque removal.



¹ Schiff T et al. a randomized clinical trial of the desensitizing efficacy of three dentifrices.

Does **Colgate Sensitive** fight cavities and can I use it as an everyday toothpaste?

Colgate Sensitive also contains fluoride which provides protection from cavities. Colgate Sensitive effectively cleans teeth, provides everyday cavity protection and has a refreshing clean mint taste.

What makes **Colgate Sensitive** toothpaste and toothbrush so special?

Colgate Sensitive delivers clinically proven relief from sensitive teeth with regular use.

It is a great tasting toothpaste that not only provides relief for sensitive teeth, but also protection from cavities and fresh breath.

Colgate 360 Sensitive toothbrush offers particularly adapted bristles and is specially designed for use with Colgate Sensitive toothpaste.



Colgate Sensitive Everyday protection from sensitivity

Colgate Sensitive MultiProtection contains Potassium Citrate 55.3mg/g, Sodium Monofluorophosphate 7.6mg/g, Zinc Citrate Trihydrate 20mg/g.

Always read the label and use as directed. See your dentist if sensitivity persists.

Colgate-Palmolive Pty Ltd, Sydney

Colgate-Palmolive Ltd, Petone

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