



Colgate Total[®]

Extend your
professional care

Designed in collaboration with dental professionals, Colgate Total is at the forefront of **ACTIVE PREVENTION**

NEW Formulation optimised for peak performance, with a novel combination of ingredients, delivering:

- 
Superior technology[^]

High levels of bioavailable stannous fluoride
- 
24-hour antibacterial protection[‡]

Long-lasting protection[§]
- 
Delightful brushing experience[~]

Designed for high patient compliance

[^] Fights plaque, tartar, and bad breath vs non-antibacterial fluoride toothpaste.

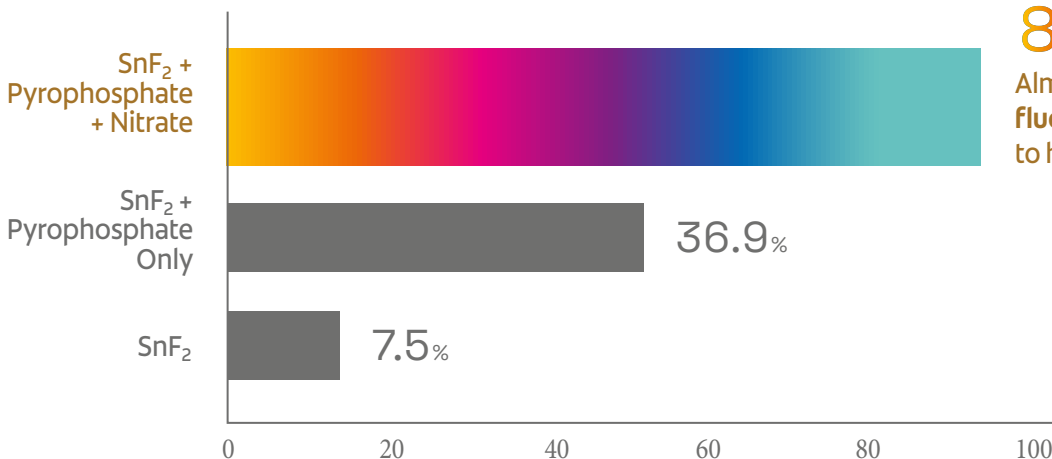
[‡] 2 x daily (every 12 hours) brushing with 4 weeks continued use.

[~] Consumer Test (HUT) – US, BZ, UK.

[§] Antibacterial protection, after 4 weeks of twice daily use.



Prevention technology providing high level of bioavailable stannous^{oo}

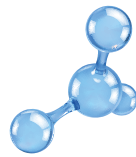


87.2%

Almost 90% of **bioactive stannous fluoride** remains after exposure to high temperatures & humidity^{oo}.

^{oo} Soluble stannous measured via aqueous simple solutions of the ingredients after 2 weeks accelerated aging at 60°C

NEW uniquely stabilised stannous fluoride formula



Phosphates
complex Sn^{2+} ions

Stannous ions

are generally unstable and easily oxidised in contact with air, water and heat.⁴

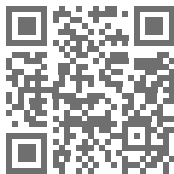


The **NEW** formulation of Colgate Total® has evolved to enhance stability of stannous ions.

Sn^{2+} = stannous cation.



Nitrate ions help block degradation of bioactive Sn^{2+}



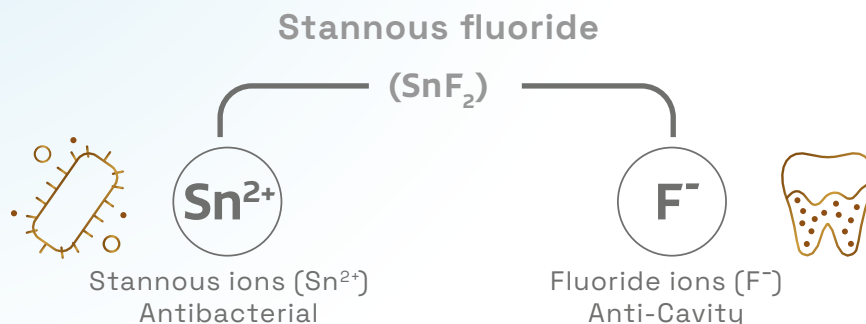
Scan to explore the science of Colgate Total and see demonstrations of its superiority

The role of stannous fluoride

Stannous fluoride oral care compositions are widely used as antimicrobial agents.^{1,2}

Stannous ions and fluoride ions have complementary properties in preventing many common oral care issues.³

- Stannous ions are bacteriostatic and exhibit bactericidal activity
- Fluoride ions have a cariostatic effect



¹ Kirsch J, et al. Influence of pure fluorides and stannous ions on the initial bacterial colonization in situ. *Sci Rep.* 2019;9(1):18499.

² Gumber HK, et al. Effect of a Stannous Fluoride Dentifrice on Biofilm Composition, Gene Expression and Biomechanical Properties. *Microorganisms.* 2022;10(9):1691.

³ Kruse AB, et al. Long-Term Use of Oral Hygiene Products Containing Stannous and Fluoride Ions: Effect on Viable Salivary Bacteria. *Antibiotics (Basel).* 2021;10(5):481.

⁴ Dorn RW, et al. Structural characterization of tin in toothpaste by dynamic nuclear polarization enhanced ¹¹⁹Sn solid-state NMR spectroscopy. *Nat Commun.* 2023;14:7423.



The Colgate Total® preventative oral care system works better together than a regular toothpaste plus brush*

Antibacterial toothpaste complements mechanical toothbrush cleaning for a superior clean*

Long-lasting protection†

24 hours Antibacterial Protection‡



Oral Care Regimen

15x

15x more effective in fighting the root cause of many common oral care issues*.

100%

100% of patients had healthier gums after 3 weeks‡ twice daily use†.

* Reduction in bacteria, after 4 weeks of twice daily use.

† Antibacterial protection after 2x daily (every 12 hours) brushing with 4 weeks continued use.

‡ Common oral issues caused by bacteria buildup such as cavities and tartar. Bacterial plaque reduction vs. non-antibacterial fluoride toothpaste and regular brush, with 1 week continued use.

§ 2x daily (every 12 hours) brushing with 4 weeks continued use.

¶ In a clinical study, the test group used a full regimen of Total Active Prevention products versus a non-antibacterial toothpaste and an ordinary flat trim toothbrush.

‡ Based on clinical study with 40 patients using Colgate Total, 100% of patients achieved improvement in gingivitis index from baseline after using Colgate Total Toothpaste, Mouthwash and Toothbrush, twice daily for 3 weeks.