A Randomised Clinical Study to Investigate the Tooth Stain Removal Efficacy of Two Experimental Desensitising Toothpastes

Haleon data on file.

Sensodyne Clinical White contains 5% sodium tripolyphosphate (STP) and 1% alumina.

Key points

- An experimental, low-abrasivity, desensitising toothpaste containing 5% STP and 1% alumina demonstrated a median two-shade improvement in tooth color from baseline following 8 weeks of twice-daily brushing.
- This difference was comparable to another experimental desensitising toothpaste containing 5% STP, 1% alumina and high-cleaning silica.
- These results demonstrate that low-abrasivity, desensitising toothpastes containing STP and alumina provide tooth whitening benefits in people with sensitive teeth.

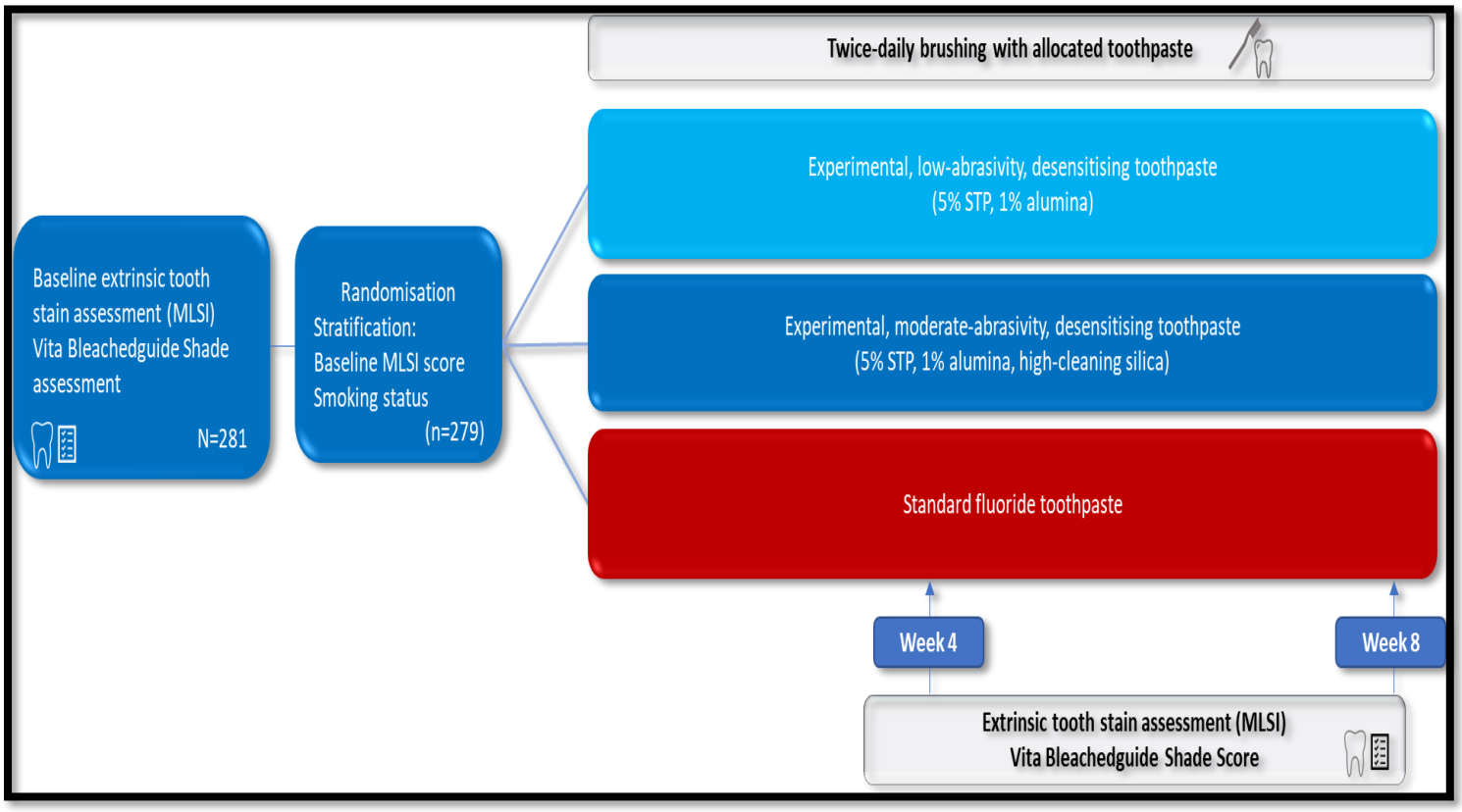
Aim

- To evaluate and compare differences in tooth staining and tooth shade after 4 and 8 weeks of twice-daily use of an experimental toothpaste containing 5% STP and 1% alumina; an experimental toothpaste containing 5% STP, 1% alumina and high-cleaning silica; and a standard fluoride toothpaste.

Methods

Study design

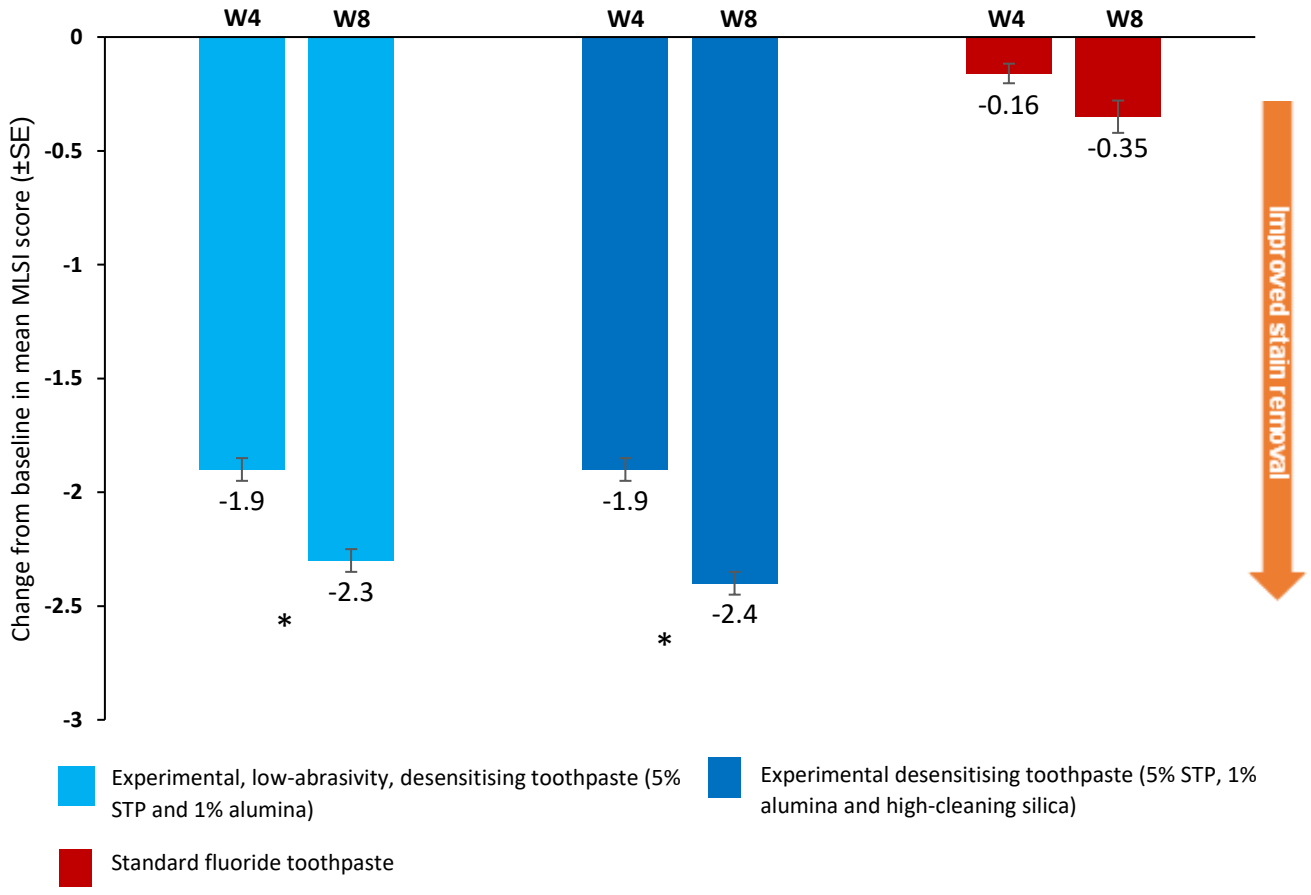
- A single-center, examiner-blind, randomised, controlled, parallel-group study in healthy adults with clinically confirmed staining on anterior tooth surfaces.
- Eligible participants (N=281) were stratified and randomised to receive one of the three study toothpastes. All study toothpastes were overwrapped to hide their identities and enable blinding.
- Participants were asked to brush with their allocated toothpaste for 1 minute twice daily for 8 weeks.
- Participants returned to the clinical study site after 4 and 8 weeks for assessment of the Macpherson modification of the Lobene Stain Index (MLSI) and Vita Bleachedguide Shade Score.



Results

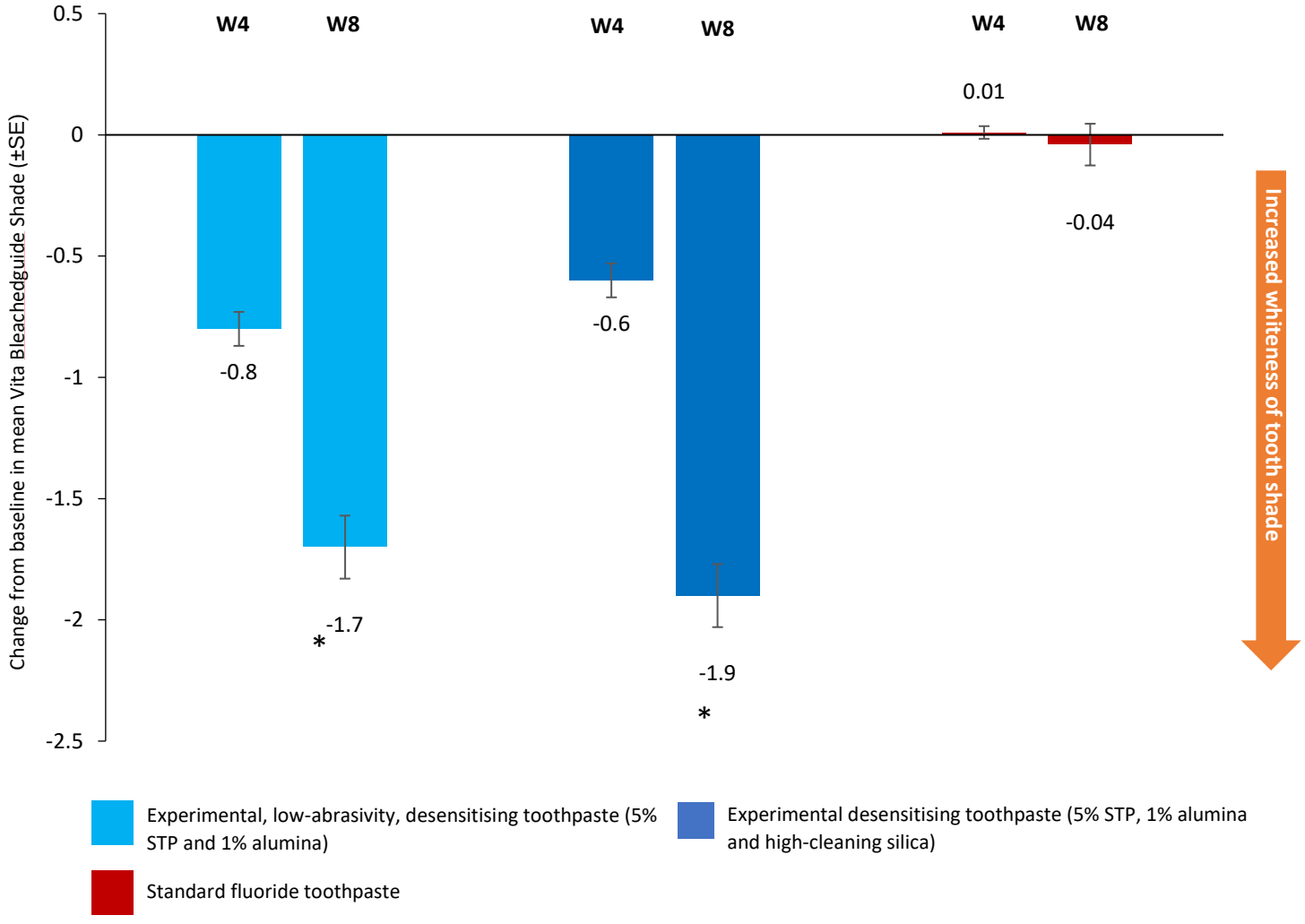
MLSI

- Both experimental desensitising toothpastes (5% STP and 1% alumina, and 5% STP, 1% alumina and high-cleaning silica), significantly reduced tooth staining at Weeks 4 and 8 ($p<0.0001$).
- Week 4 and 8 stain reduction with both of the experimental toothpastes containing the 5% STP and 1% alumina cleaning system was significantly greater than with the standard fluoride toothpaste ($p<0.0001$).



- *$p<0.0001$ Experimental, low-abrasivity, desensitising toothpaste (5% STP and 1% alumina) at Week 4 and Week 8; experimental desensitising toothpaste (5% STP and 1% alumina and high-cleaning silica) at Week 4 and Week 8.

- Vita Bleachedguide Shade
- With both experimental desensitising toothpastes (5% STP and 1% alumina, and 5% STP, 1% alumina and high-cleaning silica), there was a median 2-shade improvement in tooth color from baseline following 8 weeks of twice-daily toothbrushing



- *p<0.0001 Experimental, low-abrasivity, desensitising toothpaste (5% STP and 1% alumina) at Week 4 and Week 8; experimental desensitising toothpaste (5% STP and 1% alumina and high-cleaning silica) at Week 4 and Week 8.