Claims

1. A dental care product comprising:

    i. tin(II) fluoride, and

    ii. at least 0.01 wt% self-assembling peptides comprising a sequence of X1-X2-X1-X2-X1, wherein X1 is independently selected from the group consisting of glutamic acid, aspartic acid, glutamine and ornithine, and X2 is independently selected from the group consisting of alanine, valine, isoleucine, leucine, methionine, phenylalanine, tyrosine, tryptophan and glutamine, wherein the self-assembling peptides are essentially present in the dental care product in assembled form.

2. The dental care product of claim 1, wherein the tin(II) fluoride is present in the dental care product in a concentration of 0.1-1.0 wt%.

3. The dental care product of claim 1, wherein the self-assembling peptides comprise an amino acid sequence of SEQ ID NO: 6 (P11-4) or SEQ ID NO: 9 (P11-8) or SEQ ID NO: 15 (P11-20) or consist thereof.

4. The dental care product of claim 1, wherein the self-assembling peptides consist of SEQ ID NO: 6 (P11-4).

5. The dental care product of claim 1, further comprising a polyphosphate.

6. The dental care product of claim 5, wherein the polyphosphate is sodium tripolyphosphate, optionally,

    wherein the sodium tripolyphosphate is present in the dental care product at a concentration of 1-10 wt%.

7. The dental care product of claim 1 further comprising sodium gluconate,

    optionally, wherein the sodium gluconate is present in the dental care product at a concentration of 0.5-5 wt%.

8. The dental care product of claim 1, wherein the dental care product is a dental gel, a toothpaste, a prophylactic paste, a tooth foam or a dental rinse.

9. The dental care product of claim 1, further comprising
    a. sodium tripolyphosphate,
    b. sodium gluconate,
    c. sorbitol,
    d. cellulose gum,
    e. xylitol,

f. erythritol,
g. hydrated silica,
h. phosphoric acid,
i. optionally, NaOH, and
j. water

10. The dental care product of claim 1, wherein the pH of the dental care product is below 7.5.

11. A dental care product comprising:
i. 0.1-1.0 wt% tin(II) fluoride;
ii. at least 0.01 wt% self-assembling peptides consisting of SEQ ID NO: 6 (P11-4);
iii. 1-10 wt% sodium tripolyphosphate; and
iv. 0.5-5 wt% sodium gluconate,

wherein the pH of the dental care product is below 7.5.

12. Use of

(a) tin(II) fluoride, and
(b) at least 0.01 wt% self-assembling peptides comprising a sequence of X1-X2-X1-X2-X1, wherein X1 is independently selected from the group consisting of glutamic acid, aspartic acid, glutamine and ornithine, and X2 is independently selected from the group consisting of alanine, valine, isoleucine, leucine, methionine, phenylalanine, tyrosine, tryptophan and glutamine, wherein the self-assembling peptides are essentially present in the dental care product in assembled form,

in the manufacture of a dental care product for preventing demineralization of a tooth and/or for remineralizing tooth enamel in a subject in need thereof.

13. Use of

(a) tin(II) fluoride, and
(b) at least 0.01 wt% self-assembling peptides comprising a sequence of X1-X2-X1-X2-X1, wherein X1 is independently selected from the group consisting of glutamic acid, aspartic acid, glutamine and ornithine, and X2 is independently selected from the group consisting of alanine, valine, isoleucine, leucine, methionine, phenylalanine, tyrosine, tryptophan and glutamine, wherein the self-assembling peptides are essentially present in the dental care product in assembled form,

in the manufacture of a dental care product for destroying biofilm formed on a tooth.

14. Use of

(a) tin(II) fluoride, and
(b) at least 0.01 wt% self-assembling peptides comprising a sequence of X1-X2-X1-X2-X1, wherein X1 is independently selected from the group consisting of glutamic acid,

aspartic acid, glutamine and ornithine, and X2 is independently selected from the group consisting of alanine, valine, isoleucine, leucine, methionine, phenylalanine, tyrosine, tryptophan and glutamine, wherein the self-assembling peptides are essentially present in the dental care product in assembled form,

in the manufacture of a dental care product for treating dentinal hypersensitivity in a subject in need thereof.

15. A method for stabilizing stannous fluoride in a dental care product, comprising admixing

i) tin(II) fluoride, and

ii) at least 0.01 wt% self-assembling peptides comprising a sequence of X1-X2-X1-X2-X1, wherein X1 is independently selected from the group consisting of glutamic acid, aspartic acid, glutamine and ornithine, and X2 is independently selected from the group consisting of alanine, valine, isoleucine, leucine, methionine, phenylalanine, tyrosine, tryptophan and glutamine, wherein the self-assembling peptides are essentially present in the dental care product in assembled form.