CLAIMS

1. A dental floss comprising a polymer selected from polytetrafluoroethylene (PTFE), polypropylene, polyethylene, a styrene butadyene copolymer and a combination of two or more thereof; and a composition comprising a basic amino acid wherein the basic amino acid is arginine.

2. The floss of claim 1 wherein the basic amino acid is a physiologically acceptable salt of arginine.

3. The floss of claim 1 wherein the basic amino acid is L-arginine.

4. The floss of claim 2 wherein the physiologically acceptable salt of the basic amino acid is a carbonate.

5. The floss of claim 2 wherein the basic amino acid salt is arginine bicarbonate.

6. The floss of any one of the preceding claims wherein the composition further comprises a fluoride ion source.

7. The floss of any one of the preceding claims, wherein the composition further comprises an antiseptic or antimicrobial compound.

8. The floss of any one of the preceding claims, wherein the composition further comprises additional ingredients selected from analgesic agents, coagulants, anti-inflammatory agents, opioids, and vitamins.

9. The floss of any one of the preceding claims wherein the polymer is coated or impregnated with the composition comprising a basic amino acid wherein the basic amino acid is arginine.

10. A package for storing or dispensing dental floss comprising a chamber containing a composition comprising a basic amino acid, wherein the floss is exposed to the composition comprising a basic amino acid during storage or dispensing; and wherein the dental floss comprises a polymer selected from polytetrafluoroethylene (PTFE), polypropylene, polyethylene, a styrene butadyene copolymer and a combination of two or more thereof wherein the basic amino acid is arginine.

11. Use of a polymer selected from polytetrafluoroethylene (PTFE), polypropylene, polyethylene, a styrene butadiene copolymer and a combination of two or more thereof; and a composition comprising a basic amino acid wherein the basic amino acid is arginine, in the manufacture of a dental floss of any one of claims 1 to 9 for

(i) reducing or inhibiting formation of dental caries,

(ii) reducing, repairing or inhibiting pre-carious lesions of the enamel,

(iii) reducing or inhibiting demineralization and promoting remineralization of the teeth,

(iv) reducing hypersensitivity of the teeth,

(v) reducing or inhibiting gingivitis,

(vi) promoting healing of sores or cuts in the mouth,

(vii) reducing levels of acid producing bacteria,

(viii) increasing relative levels of arginolytic bacteria,

(ix) inhibiting microbial biofilm formation in the oral cavity,

(x) raising and/or maintaining plaque pH at levels of at least pH 5.5,

(xi) reducing plaque accumulation,

(xii) cleaning the teeth and oral cavity,

(xiii) immunizing the teeth against cariogenic bacteria, and/or

(xiv) reducing erosion,

(xv) enhancing systemic health, and/or

(xvi) treating or inhibiting dry mouth.

12. The floss of claim 6, wherein said fluoride ion source is selected from stannous fluoride, sodium fluoride, potassium fluoride, sodium monofluorophosphate,

sodium fluorosilicate, ammonium fluorosilicate, amine fluoride, ammonium fluoride, and combinations thereof.

13. The floss of any one of claims 1 to 10, wherein said composition further comprises a potassium ion source.

CLAIMS

1. A dental floss in combination or association with a basic amino acid.

2. The floss of claim 1 wherein the basic amino acid is a physiologically acceptable salt of the basic amino acid.

3. The floss of claims 1 or 2 wherein the basic amino acid is arginine, lysine, citrullene, ornithine, creatine, histidine, diaminobutanoic acid, diaminoproprionic acid, salts thereof and/or combinations thereof.

4. The floss of any of the preceding claims wherein the basic amino acid has the L-configuration.

5. The floss of any of the preceding claims wherein the basic amino acid is arginine.

6. The floss of any of the preceding claims wherein the basic amino acid is L-arginine.

7. The floss of any of the preceding claims wherein the salt of the basic amino acid is a carbonate.

8. The floss of any one of claims 2 – 6 wherein the salt of the basic amino acid is a bicarbonate.

9. The floss of any one of claims 2 – 5 and 8 wherein the basic amino acid salt is arginine bicarbonate.

10. The floss of any one of the preceding claims further comprising a fluoride ion source.

11. The floss of any of Claims 1-10 further comprising an antiseptic or antimicrobial compound.

12. The floss of any of Claims 1-11 further comprising additional ingredients selected from analgesic agents, coagulants, anti-inflammatory agents, opioids, and vitamins.

13. The floss of any of Claims 1-12 further comprising binders, waxes or carriers.

14. The floss of any of Claims 1-13 wherein the floss is coated or impregnated with the basic amino acid.

15. A package for storing or dispensing dental floss comprising a chamber containing a basic amino acid, wherein the floss is exposed to the basic amino acid during storage or dispensing.

16. A method for manufacturing dental floss comprising admixing a basic amino acid with a monomer, reacting the monomer to produce a polymer, and forming the polymer into one or more filaments.

17. A floss obtained or obtainable by the method of claim 16.

18. A method to (i) reduce or inhibit formation of dental caries, (ii) reduce, repair or inhibit pre-carious lesions of the enamel, (iii) reduce or inhibit demineralization and promote remineralization of the teeth, (iv) reduce hypersensitivity of the teeth, (v) reduce or inhibit gingivitis, (vi) promote healing of sores or cuts in the mouth, (vii) reduce levels of acid producing bacteria, (viii) to increase relative levels of arginolytic bacteria, (ix) inhibit microbial biofilm formation in the oral cavity, (x) raise and/or maintain plaque pH at levels of at least pH 5.5, (xi) reduce plaque accumulation, (xii) clean the teeth and oral cavity, (xiii) immunize the teeth against cariogenic bacteria, and/or (xiv) reduce erosion, (xv) enhance systemic health, and/or (xvi) treat or inhibit dry mouth, the method comprising flossing the teeth or other surfaces of the oral cavity of a patient in need thereof with a dental floss in combination or association with a basic amino acid in free or salt form.