CLAIMS

1. A polymer system comprising:

one or more anionic mucoadhesive polysaccharide polymers;

an acrylate polymer; and

a chitosan derivative;

wherein the weight ratio of anionic mucoadhesive polysaccharide polymer to acrylate polymer to chitosan derivative is about 2:1:6.

2. The polymer system of claim 1, wherein at least one of said one or more anionic mucoadhesive polysaccharide polymers is carboxymethyl cellulose.

3. The polymer system of claim 1 or claim 2, wherein at least one of said one or more anionic mucoadhesive polysaccharide polymers is xanthan gum.

4. The polymer system of any one of claims 1 to 3, wherein said acrylate polymer is carbomer.

5. The polymer system of any one of claims 1 to 4, wherein said chitosan derivative is selected from: dicarboxylic acid chitosan; chitin-glucan; and carboxymethyl chitosan.

6. The polymer system of any one of claims 1 to 5, wherein said chitosan derivative is carboxymethyl chitosan.

7. Use of the polymer system of any one of claims 1 to 6 in the manufacture of a medicament for treating or preventing xerostomia.

20. The composition of claim 19, wherein the plasticizer is selected from: polyethylene glycol; propylene glycol; xylitol; triacetin; triethyl citrate; mineral oil; castor oil; vegetable oil; and a combination of two or more thereof.

21. The composition of any one of claims 8 to 20, further comprising one or more components selected from a fluoride ion source; a tartar control agent; a buffering agent; an abrasive; and a combination of two or more thereof.

22. The composition of claim 21, wherein at least one of the one or more components is a fluoride ion source selected from: stannous fluoride, sodium fluoride, potassium fluoride, sodium monofluorophosphate, sodium fluorosilicate, ammonium fluorosilicate, amine fluoride, ammonium fluoride, and a combination of two or more thereof.

23. Use of a composition according to any one of claims 8 to 22 in the manufacture of a medicament for treating or preventing a condition of the oral cavity.

24. The use of claim 23, wherein said condition of the oral cavity is xerostomia.

CLAIMS

1. A polymer system comprising:
one or more anionic mucoadhesive polysaccharide polymers;
an acrylate polymer; and
a chitosan derivative;
wherein the weight ratio of anionic mucoadhesive polysaccharide polymer to acrylate polymer to chitosan derivative is about 2:1:6.

2. The polymer system of claim 1, wherein at least one of said one or more anionic mucoadhesive polysaccharide polymers is carboxymethyl cellulose.

3. The polymer system of claim 1 or claim 2, wherein at least one of said one or more anionic mucoadhesive polysaccharide polymers is xanthan gum.

4. The polymer system of any one of claims 1 to 3, wherein said acrylate polymer is carbomer.

5. The polymer system of any one of claims 1 to 4, wherein said chitosan derivative is selected from: dicarboxylic acid chitosan; chitin-glucan; and carboxymethyl chitosan.

6. The polymer system of any one of claims 1 to 5, wherein said chitosan derivative is carboxymethyl chitosan.

7. A method of treating or preventing xerostomia comprising contacting an oral cavity surface of a subject in need thereof with the polymer system of any one of claims 1 to 6.

20. The composition of claim 19, wherein the plasticizer is selected from: polyethylene glycol; propylene glycol; xylitol; triacetin; triethyl citrate; mineral oil; castor oil; vegetable oil; and a combination of two or more thereof.

21. The composition of any one of claims 8 to 20, further comprising one or more components selected from a fluoride ion source; a tartar control agent; a buffering agent; an abrasive; and a combination of two or more thereof.

22. The composition of claim 21, wherein at least one of the one or more components is a fluoride ion source selected from: stannous fluoride, sodium fluoride, potassium fluoride, sodium monofluorophosphate, sodium fluorosilicate, ammonium fluorosilicate, amine fluoride, ammonium fluoride, and a combination of two or more thereof.

23. A method of treating or preventing a condition of the oral cavity comprising, contacting an oral cavity surface of a subject in need thereof, with a composition according to any one of claims 8 to 22.

24. The method of claim 23, wherein said condition of the oral cavity is xerostomia.