CLAIMS

1. A mouthwash comprising an aqueous solution of
    a. an effective amount of an orally acceptable soluble zinc salt, wherein the zinc salt is present in an amount corresponding to 0.05 to 2 wt %; and
    b. an effective amount of a preservative selected from methylisothiazolinone (MIT), benzyl alcohol, glycerol monocaprylate, and combinations thereof.
2. The mouthwash of claim 1 wherein the zinc salt is zinc citrate.
3. The mouthwash of any of the preceding claims wherein the preservatives are present, separately or in combination, in amounts as follows:
    a. MIT: 0.0005 – 0.1 wt. %
    b. benzyl alcohol: 0.05 – 0.25 wt.%
    c. glycerol monocaprylate: 0.01% - 0.25 wt.%.
4. A mouthwash according to any of the preceding claims further comprising a pyrophosphate.
5. A mouthwash according to any of the preceding claims further comprising a synthetic anionic polymeric polycarboxylate.
6. A mouthwash according to any of the preceding claims further comprising a fluoride ion source.
7. A mouthwash according to any of the preceding claims which is ethanol-free.
8. A mouthwash according to any of the preceding claims further comprising one or more of humectants, flavorings, and surfactants.
9. A mouthwash according to any of the preceding claims wherein the preservative comprises an amount effective to provide microbial control.
10. Use of the mouthwash of any of the preceding claims in the manufacture of a medicament for
    a. reducing or inhibiting formation of dental caries,
    b. reducing, repairing or inhibiting early enamel lesions,
    c. reducing or inhibiting demineralization and promoting remineralization of the teeth,

d. reducing hypersensitivity of the teeth,

e. reducing or inhibiting gingivitis,

f. promoting healing of sores or cuts in the mouth,

g. inhibiting microbial biofilm formation in the oral cavity,

h. raising and/or maintaining plaque pH at levels of at least pH 5.5 following sugar challenge,

i. reducing plaque accumulation,

j. treating, relieving or reducing dry mouth,

k. whitening teeth,

l. enhancing systemic health, including cardiovascular health,

m. reducing erosion of the teeth,

n. immunizing the teeth against cariogenic bacteria and their effects, and/or

o. cleaning the teeth and oral cavity.

11. A mouthwash according to any of claims 1 to 9, for use in

a. reducing or inhibiting formation of dental caries,

b. reducing, repairing or inhibiting early enamel lesions,

c. reducing or inhibiting demineralization and promoting remineralization of the teeth,

d. reducing hypersensitivity of the teeth,

e. reducing or inhibiting gingivitis,

f. promoting healing of sores or cuts in the mouth,

g. inhibiting microbial biofilm formation in the oral cavity,

h. raising and/or maintaining plaque pH at levels of at least pH 5.5 following sugar challenge,

i. reducing plaque accumulation,

j. treating, relieving or reducing dry mouth,

k. whitening teeth,

l. enhancing systemic health, including cardiovascular health,

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CLAIMS

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6. A mouthwash according to any of the preceding claims further comprising a fluoride ion source.
7. A mouthwash according to any of the preceding claims which is ethanol-free.
8. A mouthwash according to any of the preceding claims further comprising one or more of humectants, flavorings, and surfactants.
9. A mouthwash according to any of the preceding claims wherein the preservative comprises an amount effective to provide microbial control.
10. A method to improve oral health comprising applying an effective amount of the mouthwash of any of the preceding claims to the oral cavity of a subject in need thereof to
    a. reduce or inhibit formation of dental caries,
    b. reduce, repair or inhibit early enamel lesions,
    c. reduce or inhibit demineralization and promote remineralization of the teeth,

AMENDED SHEET

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d. reduce hypersensitivity of the teeth,

e. reduce or inhibit gingivitis,

f. promote healing of sores or cuts in the mouth,

g. inhibit microbial biofilm formation in the oral cavity,

h. raise and/or maintain plaque pH at levels of at least pH 5.5 following sugar challenge,

i. reduce plaque accumulation,

j. treat, relieve or reduce dry mouth,

k. whiten teeth,

l. enhance systemic health, including cardiovascular health,

m. reduce erosion of the teeth,

n. to immunize the teeth against cariogenic bacteria and their effects, and/or

o. clean the teeth and oral cavity.

11. A mouthwash according to any of claims 1 to 9, for use in

a. reducing or inhibiting formation of dental caries,

b. reducing, repairing or inhibiting early enamel lesions,

c. reducing or inhibiting demineralization and promoting remineralization of the teeth,

d. reducing hypersensitivity of the teeth,

e. reducing or inhibiting gingivitis,

f. promoting healing of sores or cuts in the mouth,

g. inhibiting microbial biofilm formation in the oral cavity,

h. raising and/or maintaining plaque pH at levels of at least pH 5.5 following sugar challenge,

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i. reducing plaque accumulation,

j. treating, relieving or reducing dry mouth,

k. whitening teeth,

l. enhancing systemic health, including cardiovascular health,

m. reducing erosion of the teeth,

n. immunizing the teeth against cariogenic bacteria and their effects, and/or

o. cleaning the teeth and oral cavity.

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