CLAIMS

1. A powder mixture for oral delivery of active ingredients, the powder mixture comprising a population of particles and one or more active ingredients, the population of particles including at least two types of sugar alcohol particles and being administered directly in the mouth, wherein:

at least one of said at least two types of sugar alcohol particles comprising i) non-directly compressible (non-DC) sugar alcohol particles that provide the population of particles with a salivation effect upon oral administration of the population of particles or ii) directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles and provide the population of particles with a cooling effect upon oral administration of the population of particles;

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles being present in an amount of at least 20% by weight of the powder mixture.

2. The powder mixture according to claim 1, wherein

at least one of said at least two types of sugar alcohol particles comprises i) non-directly compressible (non-DC) sugar alcohol particles or ii) directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles;

at least one of i) or ii) having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles being present in an amount of at least 20% by weight of the powder mixture.

3. The powder mixture according to any one of claims 1-2, wherein

at least one of said at least two types of sugar alcohol particles comprises i) non-directly compressible (non-DC) sugar alcohol particles or ii) directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles;

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns being present in an amount of at least 20% by weight of the powder mixture.

4. The powder mixture according to any one of claims 1-3, wherein

at least one of said at least two types of sugar alcohol particles comprises i) non-directly compressible (non-DC) sugar alcohol particles or ii) directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles;

at least one of i) or ii) having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns being present in an amount of at least 20% by weight of the powder mixture.

5. The powder mixture according to any one of claims 1-4, wherein

at least one of said at least two types of sugar alcohol particles comprises i) non-directly compressible (non-DC) sugar alcohol particles;

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles being present in an amount of at least 20% by weight of the powder mixture.

6. The powder mixture according to any one of claims 1-5, wherein

at least one of said at least two types of sugar alcohol particles comprises i) non-directly compressible (non-DC) sugar alcohol particles;

at least i) having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles being present in an amount of at least 20% by weight of the powder mixture.

7. The powder mixture according to any one of claims 1-6, wherein

at least one of said at least two types of sugar alcohol particles comprises i) non-directly compressible (non-DC) sugar alcohol particles;

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns being present in an amount of at least 20% by weight of the powder mixture.

8. The powder mixture according to any one of claims 1-7, wherein

at least one of said at least two types of sugar alcohol particles comprises i) non-directly compressible (non-DC) sugar alcohol particles;

at least i) having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns being present in an amount of at least 20% by weight of the powder mixture.

9. The powder mixture according to any one of claims 1-8, wherein

at least one of said at least two types of sugar alcohol particles comprises ii) directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles;

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles being present in an amount of at least 20% by weight of the powder mixture.

10. The powder mixture according to any one of claims 1-9, wherein

at least one of said at least two types of sugar alcohol particles comprises ii) directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles;

at least ii) having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles being present in an amount of at least 20% by weight of the powder mixture.

11. The powder mixture according to any one of claims 1-10, wherein

at least one of said at least two types of sugar alcohol particles comprises ii) directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles;

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns being present in an amount of at least 20% by weight of the powder mixture.

12. The powder mixture according to any one of claims 1-11, wherein

at least one of said at least two types of sugar alcohol particles comprises ii) directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles;

at least ii) having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns being present in an amount of at least 20% by weight of the powder mixture.

13. The powder mixture according to any one of claims 1-12, wherein the population of particles includes at least 20% of one type of sugar alcohol particles having a particle

size with more than 80% of the particles being below 250 microns and at least 20% of another type of sugar alcohol particles having a particle size with more than 80% of the particles being below 300 microns.

14. The powder mixture according to any one of claims 1-13, wherein the population of particles includes at least two types of sugar alcohol particles comprising i) non-directly compressible (non-DC) sugar alcohol particles and iii) granulated sugar alcohol particles.

15. The powder mixture according to any one of claims 1-14, wherein the population of particles includes at least three types of sugar alcohol particles comprising i) non-directly compressible (non-DC) sugar alcohol particles, ii) directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles and iii) granulated sugar alcohol particles.

16. The powder mixture according to any one of claims 1-15, wherein the population of particles includes at least two types of sugar alcohol particles comprising i) non-directly compressible (non-DC) sugar alcohol particles selected from non-DC particles of xylitol, maltitol, isomalt, mannitol, erythritol, lactitol or combinations thereof.

17. The powder mixture according to any one of claims 1-16, wherein the population of particles includes at least two types of sugar alcohol particles comprising i) non-directly compressible (non-DC) sugar alcohol particles and ii) directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles in a weight ratio between i) and ii) of between 0.2 and 5.

18. The powder mixture according to any one of claims 1-17, wherein the active ingredient comprises an active pharmaceutical ingredient.

19. A flowpack for oral delivery of active ingredients, the flow pack comprising a powder mixture comprising a population of particles and one or more active

ingredients, an outer package material enclosing the population of particles, the population of particles including at least two types of sugar alcohol particles and being administered directly in the mouth, wherein:

at least one of said at least two types of sugar alcohol particles comprising non-directly compressible (non-DC) sugar alcohol particles that provide the population of particles with a salivation effect upon oral administration of the population of particles or directly compressible (DC) sugar alcohol particles that are not granulated sugar alcohol particles and provide the population of particles with a cooling effect upon oral administration of the population of particles;

at least one of said at least two types of sugar alcohol particles having a particle size with more than 50% of the particles being below 250 microns; and

at least one of said at least two types of sugar alcohol particles being present in an amount of at least 20% by weight of the powder mixture.

20. The flowpack according to claim 19, wherein the flowpack comprises a powder mixture as defined in any one of claims 1-18.

21. Use of a powder mixture according to claims 1-18 as a powder delivery system for a mouthwash or a toothpaste.