Claims

1. A transmucosal and/or transdermal delivery system comprising:
   at least one non-ionic surfactant;
   at least one polyol; and
   at least one active agent.

2. The delivery system of claim 1, wherein the delivery system is delivered vial the oral mucosa.

3. The delivery system of claim 1, wherein the delivery system is delivered vial the nasal mucosa.

4. The delivery system of any one of claims 1 to 3, further comprising at least one oil.

5. The delivery system of claim 4, wherein the at least one oil is ethyl oleate, ethyl linoleate, caproic acid, caprylic acid, capric acid, or lauric acid, or a combination thereof.

6. The delivery system of claim 5, wherein the at least one oil is a natural oil or is derived from a natural oil.

7. The delivery system of claim 6, wherein the natural oil is coconut oil, palm kernel oil, palm oil, lemon oil, or sunflower oil, or a combination thereof.

8. The delivery system of any one of claims 1 to 7, wherein the at least one non-ionic surfactant is selected from the group consisting of a polyethoxylated castor oil, polyoxyethylene sorbitan monolaurate, polyoxyethylene sorbitan monoleate, tocopheryl polyethylene glycol succinate and mixtures thereof.

9. The delivery system of any one of claims 1 to 7, wherein the at least one non-ionic surfactant is a polyethoxylated castor oil.

10. The delivery system of any one of claims 1 to 7, wherein the at least one non-ionic surfactant is obtained by reacting castor oil or hydrogenated castor oil with ethylene oxide.

11. The delivery system of any one of claims 1 to 7, wherein the at least one non-ionic surfactant comprises glycerol polyethylene glycol ricinoleate, fatty acid esters of polyethylene glycol, free polyethylene glycols and ethoxylated glycerol.

12. The delivery system of any one of claims 1 to 7, wherein the at least one non-ionic surfactant comprises glycerol polyethylene glycol hydroxystearate, fatty acid glycerol polyglycol esters, polyethylene glycols and glycerol ethoxylate.

13. The delivery system of any one of claims 1 to 12, wherein the at least one polyol is selected from the group consisting of glycerol and propylene glycol.

14. The delivery system of any one of claims 1 to 12, wherein the at least one polyol is glycerol.

15. The delivery system of any one of claims 1 to 12, wherein the at least one polyol is propylene glycol.

16. The delivery system of claim 1 or 2, further comprising a non-aqueous solvent or a mixture of a non-aqueous solvent and water.

17. The delivery system of claim 1 or 2, further comprising ethanol.

18. The delivery system of claim 1 or 2, further comprising water.

19. The delivery system of claim 1 or 2, wherein the at least one active agent is provided in an alcohol and oil solution.

20. The delivery system of claim 1 or 2, wherein the at least one active agent is selected from a vitamin, a mineral, a hormone, an amino acid, a peptide, a fatty acid, an antioxidant, a plant extract, a nutraceutical, a statin, an immunosuppressive agent, an antibiotic, a sedative, a steroid, a proton pump inhibitor (PPI), a selective serotonin reuptake inhibitor (SSRI), an angiotensin converting enzyme (ACE) inhibitor and combinations thereof.

21. The delivery system of claim 20, wherein the statin is a fat soluble statin or a water soluble statin.

22. The delivery system of claim 21, wherein the fat soluble statin is atorvastatin calcium.

23. The delivery system of claim 21, wherein the water soluble statin is rosuvastatin calium.

24. The delivery system of claim 21, wherein the at least one active agent is insulin.

25. The delivery system of claim 20, wherein the vitamin is selected from the group consisting of vitamin A, vitamin B, vitamin C, vitamin D, vitamin E, vitamin K and combinations thereof.

26. The delivery system of claim 20, wherein the vitamin is selected from the group consisting of vitamin B1, vitamin B2, vitamin B5, vitamin B6, vitamin B7, vitamin B9 and vitamin B12.

27. The delivery system of claim 20, wherein the vitamin is vitamin D2 or vitamin D3.

28. The delivery system of claim 20, wherein the vitamin is vitamin E.

29. The delivery system of claim 20, wherein the vitamin is vitamin K.

30. The delivery system of claim 20, wherein the at least one active agent is a combination of vitamin D3 and vitamin K2.

31. The delivery system of claim 20, wherein the at least one active agent is a combination of vitamin B12 and vitamin E.

32. The delivery system of claim 20, wherein the antioxidant is Coenzyme Q10.

33. The delivery system of claim 20, wherein the plant extract is a natural extract or a synthetic version thereof.

34. The delivery system of claim 33, wherein the plant extract comprises resveratrol, a cannabis extract or one or more cannabinoids, or is hemp seed oil.

35. The delivery system of claim 20, wherein the mineral is selected from the group consisting of zinc, calcium, chromium, cooper, iron, magnesium, manganese, phosphorus, potassium.

36. The delivery system of claim 20, wherein the hormone is selected from the group consisting of melatonin, testosterone, insulin, progesterone and estrogen.

37. The delivery system of claim 36, wherein the testosterone is testosterone propionate.

38. The delivery system of claim 20, wherein the active agent is insulin.

39. The delivery system of any one of claims 1 to 38, further comprising at least one flavour.

40. The delivery system of claim 39, wherein the at least one flavour is a natural oil.

41. The delivery system of claim 40, wherein the natural oil is peppermint oil or orange oil.

42. The delivery system of any one of claims 1 to 41, further comprising at least one acidulant.

43. The delivery system of claim 42, wherein the at least one acidulant is citric acid.

44. The delivery system of any one of claims 1 to 43, further comprising at least one preservative.

45. The delivery system of claim 44, wherein the at least one preservative is potassium sorbate or phenoxyethanol.

46. The delivery system of any one of claims 1 to 45, further comprising at least one sweetener.

47. The delivery system of claim 46, wherein the at least one sweetener is a natural sweetener.

48. The delivery system of claim 47, wherein the natural sweetener is stevia.

49. The delivery system of any one of claims 1 to 49, wherein the at least one non-ionic surfactant has an Hydrophile-Lipophile Balance (HLB) value of from about 8 to about 20.

50. The delivery system of of any one of claims 1 to 50, wherein the at least one non-ionic surfactant has an Hydrophile-Lipophile Balance (HLB) value of from about 12 to about 16.

51. The delivery system of any one of claims 1 to 51, which has a viscosity of from about 5 cP to about 35 cP.

52. The delivery system of any one of claims 1 to 52, which has an average particle size of from about 5 nm to about 200 nm.

53. The delivery system of any one of claims 1 to 52, wherein the ratio of the at least one active agent to the at least one non-ionic surfactant is from about 1:5 to about 1:15 by weight.

54. The delivery system of any one of claims 1 to 53, wherein the ratio of the at least one non-ionic surfactant to the at least one polyol is from about 2:1 to about 1.5:1 by weight.

55. A method for preventing and/or reducing blood cholesterol in a subject, the method comprising administering an effective amount of the delivery system of any one of claims 1 to 20 to the subject, wherein the active agent in the delivery system is a statin.

56. A method for treating dyslipidemia in a subject, the method comprising administering an effective amount of the delivery system of any one of claims 1 to 20 to the subject, wherein the active agent in the delivery system is a statin.

57. A method for preventing and/or treating cardiovascular disease in a subject, the method comprising administering an effective amount of the delivery system of any one of claims 1 to 20 to the subject, wherein the active agent in the delivery system is a statin.

58. A method for treating diabetes, for regulating blood glucose levels and/or for preventing or treating hyperglycaemia in a subject, the method comprising administering an effective amount of the delivery system of any one of claims 1 to 20 to the subject, wherein the active agent in the delivery system is insulin.