WHAT IS CLAIMED IS:

1. A method of treating Alzheimer's disease, Parkinson's disease, atherosclerosis, and/or stroke, the method comprising administering to a subject in need thereof a therapeutically effective amount of calcium lactate.

2. A method of treating multiple sclerosis, age-related macular degeneration, nonalcoholic fatty liver disease (NAFLD), and/or rheumatoid arthritis, the method comprising administering to a subject in need thereof a therapeutically effective amount of calcium lactate.

3. The method of claim 2, wherein the method is for treating NAFLD and the NAFLD is nonalcoholic steatohepatitis (NASH).

4. A method of treating pulpitis and/or periodontitis, the method comprising administering to a subject in need thereof a therapeutically effective amount of calcium lactate.

5. A method of treating inflammatory bowel disease (IBD), the method comprising administering to a subject in need thereof a therapeutically effective amount of calcium lactate.

6. The method of claim 5, wherein the IBD is Crohn's disease or ulcerative colitis.

7. A method of treating spinal cord injury, cerebral hemorrhage, myocardial infarction, keratitis, and/or diabetic retinopathy, the method comprising administering to a subject in need thereof a therapeutically effective amount of calcium lactate.

8. The method of any one of claims 1-7, wherein the calcium lactate is administered in a pharmaceutical composition comprising a pharmaceutically acceptable carrier, excipient, or diluent.

9. The method of any one of claims 1-8, wherein the pharmaceutical composition is formulated into liquid, powder, aerosol, injection, fluid transfusion, patch, capsule, pill, tablet, depot, or suppository.

10. The method of any one of claims 1-8, wherein the pharmaceutical composition comprises a therapeutically effective amount of calcium lactate as an active agent and a pharmaceutically acceptable polysaccharide, polymer, lipid, or combinations thereof.

11. The method of claim 10, wherein the pharmaceutical composition comprises the calcium lactate and the polysaccharide.

12. The method of claim 11, wherein a weight ratio of the calcium lactate to the polysaccharide is 1:<0.2 to 1:5.

13. The method of claim 11, wherein a weight ratio of the calcium lactate to the polysaccharide is 1:<0.2.

14. The method of claim 11, wherein a weight ratio of the calcium lactate to the polysaccharide is 1:0.2 to 1:5.

15. The method of any one of claims 10-14, further comprising a polymer and/or lipid.

16. The method of claim 15, further comprising the polymer and lipid, wherein the weight ratio of the polymer to the lipid is 1:0.1 to 1:50.

17. The method of any one of claims 15-16, wherein the weight ratio of the calcium lactate to the polymer and/or lipid is at least 1:5.

18. The method of claim 17, wherein a weight ratio of the calcium lactate to the polymer and/or lipid is 1:5 to 1:30.

19. The method of claim 10, comprising the calcium lactate and the polymer and/or lipid.

20. The method of claim 19, comprising the polymer and lipid, wherein the weight ratio of the polymer to the lipid is 1:0.1 to 1:50.

21. The method of any one of claims 19-20, wherein a weight ratio of the calcium lactate to the polymer and/or lipid is at least 1:5.

22. The method of any one of claims 19-21, wherein the weight ratio of the calcium lactate to the polymer and/or lipid is 1:5 to 1:30.

23. The method of any one of claims 10-22, wherein the composition is short-acting.

24. The method of any one of claims 10-22, wherein the composition is long-acting.

25. The method of any one of claims 10-24, wherein the composition is an injectable composition.

26. The method of any one of claims 10-25, comprising the polysaccharide that is a cellulose derivative, pectin, hyaluronic acid, starch, guar gum, chitosan, gelatin, collagen, alginate, alginic acid or combinations thereof.

27. The method of any one of claims 10-26, comprising the polymer that is a poloxamer, polyvinylpyrrolidone, polyethylene glycol (PEG), polyglycolic lactic acid (PLGA), or combinations thereof.

28. The method of any one of claims 10-27, comprising the lipid that is a mono- or tri-fatty acid glycerin ester or polyethylene glycol, polyethylene glycol esters of vegetable oils, fatty acid propylene glycol esters, sesame oil, soybean oil, castor oil, corn oil, palm oil, peanut oil, cacao oil, cottonseed oil, sunflower seed oil, safflower oil, almond oil, olive oil, hydrogenated oil, oleic acid, linolenic acid, linoleic acid, palmitic acid, palmitoleic acid, arachadonic acid, myristic acid, capric acid, caprylic acid, lauric acid, stearic acid, ethyl oleate, isopropyl palmitate, octyldodecyl myristate, cetyl palmitate, lauryl alcohol, oleyl alcohol, cetyl alcohol, stearyl alcohol, or combinations thereof.

29. The method of any one of claims 10-23 and 25-29, wherein upon placement of the composition in an in vitro dissolution test comprising an elution test method at 300 rpm in 200 ml aqueous medium having a pH of 6.8 at 37°C using a nylon filter having a pore size of 45 µm, at least about 40% of the active agent is released after 6 hours.

30. The method of any one of claims 10-23 and 25-29, wherein upon placement of the composition in an in vitro dissolution test comprising an elution test method at 300 rpm in

200 ml aqueous medium having a pH of 6.8 at 37°C using a nylon filter having a pore size of 45 µm, at least about 60% of the active agent is released after 12 hours.

31. The method of any one of claims 10-23 and 25-30, wherein upon placement of the composition in an in vitro dissolution test comprising an elution test method at 300 rpm in 200 ml aqueous medium having a pH of 6.8 at 37°C using a nylon filter having a pore size of 45 µm, at least about 80% of the active agent is released after 24 hours.

32. The method of any one of claims 10-23 and 25-31, wherein upon placement of the composition in an in vitro dissolution test comprising an elution test method at 300 rpm in 200 ml aqueous medium having a pH of 6.8 at 37°C using a nylon filter having a pore size of 45 µm, at least about 90% of the active agent is released after 48 hours.

33. The method of any one of claims 10-12, 14-22, and 24-28, wherein upon placement of the composition in an in vitro dissolution test comprising an elution test method at 300 rpm in 200 ml aqueous medium having a pH of 6.8 at 37°C using a nylon filter having a pore size of 45 µm, less than about 40% of the active agent is released after 24 hours.

34. The method of any one of claims 10-12, 14-22, 24-28, and 33, wherein upon placement of the composition in an in vitro dissolution test comprising an elution test method at 300 rpm in 200 ml aqueous medium having a pH of 6.8 at 37°C using a nylon filter having a pore size of 45 µm, less than about 60% of the active agent is released after 48 hours.

35. The method of any one of claims 10-12, 14-22, 24-28, and 33-34, wherein upon placement of the composition in an in vitro dissolution test comprising an elution test method at 300 rpm in 200 ml aqueous medium having a pH of 6.8 at 37°C using a nylon filter having a pore size of 45 µm, less than about 80% of the active agent is released after 72 hours.

36. The method of any one of claims 10-12, 14-22, 24-28, and 33-35, wherein upon placement of the composition in an in vitro dissolution test comprising an elution test method at 300 rpm in 200 ml aqueous medium having a pH of 6.8 at 37°C using a nylon filter having a pore size of 45 µm, less than about 90% of the active agent is released after 144 hours.

37. The method of any one of claims 10-36, wherein the composition is contained in a sterile glass or polyolefin container.

38. The method of any one of claims 1-8, wherein the calcium lactate is coated with a pharmaceutically acceptable enteric coating.

39. The method of claim 38, wherein the enteric coating comprises hydroxypropyl methyl cellulose phthalate (HPMCP), cellulose acetate phthalate (CAP), polyvinyl acetate phthalate (PVAP), shellac, polymer of methacrylic acid and an ester thereof, or combinations thereof.

40. The method of any one of claims 38-39, wherein the weight ratio of the calcium lactate to the enteric coating is 10:0.5 to 1:1.5.

41. The method of any one of claims 38-40, wherein in an in vitro dissolution test comprising a USP Paddle method at a paddle speed of 50 rpm at 37°C, when the composition is placed in 0.1 HCl for 120 minutes followed by adjusting to pH 6.8 with phosphate buffer, less than about 20% of the active agent is released after 30 minutes.

42. The method of any one of claims 38-41, wherein in an in vitro dissolution test comprising a USP Paddle method at a paddle speed of 50 rpm at 37°C, when the composition is placed in 0.1 N HCl for 120 minutes followed by adjusting to pH 6.8 with phosphate buffer, less than 30% of the active agent is released after 60 minutes.

43. The method of any one of claims 38-42, wherein in an in vitro dissolution test comprising a USP Paddle method at a paddle speed of 50 rpm at 37°C, when the composition is placed in 0.1 N HCl for 120 minutes followed by adjusting to pH 6.8 with phosphate buffer, less than 50% of the active agent is released after 120 minutes.

44. The method of any one of claims 38-43, wherein in an in vitro dissolution test comprising a USP Paddle method at a paddle speed of 50 rpm at 37°C, when the composition is placed in 0.1 N HCl for 120 minutes followed by adjusting to pH 6.8 with phosphate buffer, less than 10% of the active agent is released after 120 minutes.

45. The method of any one of claims 1-7, wherein the calcium lactate is provided in a food or nutrient composition comprising calcium lactate.

46. The method of claim 45, wherein the composition is an injectable nutritional supplement.