34. The unit dosage form of claim 28, wherein the coating is a pH-dependent enteric coating.

35. A dosage kit, comprising:
a plurality of unit dosage forms according to claim 18.

36. The dosage kit of claim 35, wherein:
the dosage kit comprises at least 60 unit dosage forms.

37. The dosage kit of claim 35, wherein:
the dosage kit comprises at least 120 unit dosage forms.

38. A method of treating severe hypertriglyceridemia, comprising:
orally administering the pharmaceutical composition of claim 1 to a patient having pre-treatment serum or plasma triglyceride levels ≥500 mg/dL,
in an amount and for a duration effective to reduce serum or plasma triglycerides below pre-treatment levels.

39. The method of claim 38, wherein the effective amount is at least about 2g per day.

40. The method of claim 38, wherein the effective amount is at least about 3g per day.

41. The method of claim 38, wherein the effective amount is at least about 4g per day.

42. The method of claim 38, wherein the effective amount is about 2g per day.

43. A method of treating severe hypertriglyceridemia, comprising:

orally administering the pharmaceutical composition of claim 13 to a patient having pre-treatment serum or plasma triglyceride levels ≥500 mg/dL,

in an amount and for a duration effective to reduce serum or plasma triglyceride levels below pre-treatment levels.

44. The method of claim 43, wherein the effective amount is at least about 2g per day.

45. The method of claim 38, wherein the pharmaceutical composition is administered daily for at least 30 days.

46. The method of claim 43, wherein the pharmaceutical composition is administered daily for at least 30 days.

47. The method of claim 38, wherein the pharmaceutical composition is administered in the form of one or more unit dosage forms according to claim 20.

48. The method of claim 38, further comprising:

orally administering an effective amount of a statin.

49. The method of claim 48, wherein the statin is selected from the group consisting of: pravastatin, lovastatin, simvastatin, atorvastatin, fluvastatin, rosuvastatin, and pitavastatin.

50. A method of treating patients who have serum or plasma triglyceride levels of about 200 mg/dL to about 500 mg/dL on statin therapy, comprising:

orally administering an effective amount of a statin, and

orally administering an effective amount of the pharmaceutical composition of claim 1.

51. In a method of treating patients on statin therapy who have serum or plasma triglyceride levels of about 200 mg/dL to about 500 mg/dL, the improvement comprising:

adjunctively administering an effective amount of the pharmaceutical composition of claim 1.

52. The method of claim 50, wherein the effective amount of the pharmaceutical composition of claim 1 is at least about 2g per day.

53. The method of claim 50, wherein the effective amount of the pharmaceutical composition of claim 1 is at least about 3g per day.

54. The method of claim 50, wherein the effective amount of the pharmaceutical composition of claim 1 is at least about 4g per day.

55. The method of claim 50, wherein the effective amount of the pharmaceutical composition of claim 1 is about 2g per day.

56. A method of treating a patient with elevated pre-treatment serum or plasma triglycerides, the method comprising:

administering the pharmaceutical composition of claim 1 in an amount and for a duration effective to reduce arachidonic acid (AA) concentration in plasma by at least about 5%.

57. The method of claim 56, wherein the pharmaceutical composition is administered in an amount and for a duration effective to reduce plasma AA concentration by at least about 10%.

58. The method of claim 56, wherein the pharmaceutical composition is administered in an amount and for a duration effective to reduce plasma AA concentration by at least about 20%.

59. A method of treating a patient with elevated pre-treatment serum or plasma triglycerides, the method comprising:

administering the pharmaceutical composition of claim 1 in an amount and for a duration effective to reduce plasma arachidonic acid concentration by at least about 50 μg/mL.

60. The method of claim 59, wherein the pharmaceutical composition is administered in an amount and for a duration effective to reduce plasma arachidonic acid concentration by at least about 75 μg/mL.

61. A method of treating a patient with elevated pre-treatment serum or plasma triglycerides, the method comprising:

administering the pharmaceutical composition of claim 1 in an amount and for a duration effective to increase plasma EPA/AA ratio to at least about 0.25.

62. The method of claim 61, wherein the pharmaceutical composition is administered for an amount and for a duration effective to increase plasma EPA/AA ratio to at least about 0.50.

63. The method of claim 62, wherein the pharmaceutical composition is administered in an amount and for a duration effective to increase plasma EPA/AA ratio to at least about 0.65.

64. A method of lowering serum or plasma ApoCIII levels, comprising

administering the pharmaceutical composition of claim 1 in an amount and for a duration sufficient to reduce serum or plasma ApoCIII from pre-treatment levels.

65. In a method of making a pharmaceutical composition of polyunsaturated fatty acids in free acid form, the improvement comprising:

subjecting an intermediate feedstock of transesterified fish oil comprising the ethyl esters of

EPA, in an amount of at least about 44% (a/a),

DHA, in an amount of at least about 14% (a/a), and

DPA, in an amount of at least about 1 % (a/a),

to a step of urea inclusion complexation,

wherein the amount of urea used for complexation is calculated according to formula I(a), or according to formula I(b), or according to both formula I(a) and formula I(b) wherein the urea amount is set to a value within the range set by, and inclusive of, the results of formulae I(a) and I(b),

$$[\text{Urea}] = F_{\text{enrichment-DHA}} * ((\text{DHA}_{\text{target}} - \text{DHA-EE}_{\text{input}})/\text{DHA-EE}_{\text{input}})) \quad \text{(Ia)}$$

$$[\text{Urea}] = F_{\text{enrichment-EPA}} * ((\text{EPA}_{\text{target}} - \text{EPA-EE}_{\text{input}})/\text{EPA-EE}_{\text{input}})) \quad \text{(Ib)},$$

[00100] wherein $F_{\text{enrichment-DHA}}$ and $F_{\text{enrichment-EPA}}$ are each about 100/0.34.

66. The method of claim 65, wherein

EPA-EE is present in the intermediate feedstock in an amount of at least about 45% (a/a),

DHA-EE is present in the intermediate feedstock in in an amount of at least about 15% (a/a), and

DPA-EE is present in the intermediate feedstock in in an amount of at least about 2.5% (a/a).

67. The method of claim 65, wherein the pharmaceutical composition is a pharmaceutical composition according to claim 1.

68. A pharmaceutical composition according to claim 1, made by a process according to claim 66.

34. The unit dosage form of claim 28, wherein the coating is a pH-dependent enteric coating.

35. A dosage kit, comprising:
a plurality of unit dosage forms according to claim 18.

36. The dosage kit of claim 35, wherein:
the dosage kit comprises at least 60 unit dosage forms.

37. The dosage kit of claim 35, wherein:
the dosage kit comprises at least 120 unit dosage forms.

38. The pharmaceutical composition of claim 1 for use in the treatment of severe hypertriglyceridemia in a patient, wherein the patient has pre-treatment serum or plasma triglyceride levels ≥500 mg/dL, and

wherein the treatment comprises administering to the patient an amount of the pharmaceutical composition and for a duration effective to reduce serum or plasma triglycerides below pre-treatment levels.

39. The pharmaceutical composition of claim 38, wherein the effective amount is at least about 2g per day.

40. The pharmaceutical composition of claim 38, wherein the effective amount is at least about 3g per day.

41. The pharmaceutical composition of claim 38, wherein the effective amount is at least about 4g per day.

42. The pharmaceutical composition of claim 38, wherein the effective amount is about 2g per day.

43. The pharmaceutical composition of claim 13 for use in the treatment of severe hypertriglyceridemia in a patient, wherein the patient has pre-treatment serum or plasma triglyceride levels ≥500 mg/dL, and

wherein the treatment comprises administering to the patient an amount of the pharmaceutical composition and for a duration effective to reduce serum or plasma triglyceride levels below pre-treatment levels.

44. The pharmaceutical composition of claim 43, wherein the effective amount is at least about 2g per day.

45. The pharmaceutical composition of claim 38, wherein the treatment comprises administration of the pharmaceutical composition daily for at least 30 days.

46. The pharmaceutical composition of claim 43, wherein the treatment comprises administration of the pharmaceutical composition daily for at least 30 days.

47. The pharmaceutical composition of claim 38, wherein the treatment comprises administration of the pharmaceutical composition in the form of one or more unit dosage forms according to claim 20.

48. The pharmaceutical composition of claim 38, wherein the treatment further comprises:

orally administering an effective amount of a statin.

49. The pharmaceutical composition of claim 48, wherein the statin is selected from the group consisting of: pravastatin, lovastatin, simvastatin, atorvastatin, fluvastatin, rosuvastatin, and pitavastatin.

50. An effective amount of a statin and an effective amount of the pharmaceutical composition of claim 1 for use in the treatment of a patient on statin therapy who has serum or plasma triglyceride levels of about 200 mg/dL to about 500 mg/dL.

51. An effective amount of the pharmaceutical composition of claim 1 for use in the treatment of a patient on statin therapy who has serum or plasma triglyceride levels of about 200 mg/dL to about 500 mg/dL.

52. The pharmaceutical composition of claim 50, wherein the effective amount of the pharmaceutical composition of claim 1 is at least about 2g per day.

53. The pharmaceutical composition of claim 50, wherein the effective amount of the pharmaceutical composition of claim 1 is at least about 3g per day.

54. The pharmaceutical composition of claim 50, wherein the effective amount of the pharmaceutical composition of claim 1 is at least about 4g per day.

55. The pharmaceutical composition of claim 50, wherein the effective amount of the pharmaceutical composition of claim 1 is about 2g per day.

56. The pharmaceutical composition of claim 1 for use in the treatment of a patient with elevated pre-treatment serum or plasma triglycerides,

wherein the treatment comprises administering the pharmaceutical composition of claim 1 to the patient in an amount and for a duration effective to reduce arachidonic acid (AA) concentration in plasma by at least about 5%.

57. The pharmaceutical composition of claim 56, wherein the treatment comprises administration of the pharmaceutical composition in an amount and for a duration effective to reduce plasma AA concentration by at least about 10%.

58. The pharmaceutical composition of claim 56, wherein the treatment comprises administration of the pharmaceutical composition in an amount and for a duration effective to reduce plasma AA concentration by at least about 20%.

59. The pharmaceutical composition of claim 1 for use in the treatment of a patient with elevated pre-treatment serum or plasma triglycerides,

wherein the treatment comprises administering the pharmaceutical composition of claim 1 to the patient in an amount and for a duration effective to reduce plasma arachidonic acid (AA) concentration by at least about 50 μg/mL.

60. The pharmaceutical composition of claim 59, wherein the treatment comprises administration of the pharmaceutical composition in an amount and for a duration effective to reduce plasma arachidonic acid concentration by at least about 75 μg/mL.

61. The pharmaceutical composition of claim 1 for use in the treatment of a patient with elevated pre-treatment serum or plasma triglycerides,

wherein the treatment comprises administering the pharmaceutical composition of claim 1 to the patient in an amount and for a duration effective to increase plasma EPA/AA ratio to at least about 0.25.

62. The pharmaceutical composition of claim 61, wherein the treatment comprises administration of the pharmaceutical composition in an amount and for a duration effective to increase plasma EPA/AA ratio to at least about 0.50.

63. The pharmaceutical composition of claim 62, wherein the treatment comprises administration of the pharmaceutical composition in an amount and for a duration effective to increase plasma EPA/AA ratio to at least about 0.65.

64. The pharmaceutical composition of claim 1 for use in the treatment to lower serum or plasma ApoCIII levels in a patient,

wherein the treatment comprises administering the pharmaceutical composition of claim 1 to the patient in an amount and for a duration sufficient to reduce serum or plasma ApoCIII from pre-treatment levels.

65. Use of the pharmaceutical composition of claim 1 in the manufacture of a medicament for the treatment of severe hypertriglyceridemia in a patient, wherein the patient has pre-treatment serum or plasma triglyceride levels ≥500 mg/dL, and

wherein the treatment comprises administering to the patient an amount of the pharmaceutical composition and for a duration effective to reduce serum or plasma triglycerides below pre-treatment levels.

66. The use of claim 65, wherein the effective amount is at least about 2g per day.

67. The use of claim 65, wherein the effective amount is at least about 3g per day.

68. The use of claim 65, wherein the effective amount is at least about 4g per day.

69. The use of claim 65, wherein the effective amount is about 2g per day.

70. Use of the pharmaceutical composition of claim 13 in the manufacture of a medicament for the treatment of severe hypertriglyceridemia in a patient, wherein the patient has pre-treatment serum or plasma triglyceride levels ≥500 mg/dL, and

wherein the treatment comprises administering to the patient an amount of the pharmaceutical composition and for a duration effective to reduce serum or plasma triglyceride levels below pre-treatment levels.

71. The use of claim 70, wherein the effective amount is at least about 2g per day.

72. The use of claim 65, wherein the treatment comprises administration of the pharmaceutical composition daily for at least 30 days.

73. The use of claim 70, wherein the treatment comprises administration of the pharmaceutical composition daily for at least 30 days.

74. The use of claim 65, wherein the treatment comprises administration of the pharmaceutical composition in the form of one or more unit dosage forms according to claim 20.

75. The use of claim 65, wherein the treatment further comprises:
orally administering an effective amount of a statin.

76. The use of claim 75, wherein the statin is selected from the group consisting of: pravastatin, lovastatin, simvastatin, atorvastatin, fluvastatin, rosuvastatin, and pitavastatin.

77. Use of an effective amount of a statin and an effective amount of the pharmaceutical composition of claim 1 in the manufacture of a medicament for the treatment of a patient on statin therapy who has serum or plasma triglyceride levels of about 200 mg/dL to about 500 mg/dL.

78. Use of an effective amount of the pharmaceutical composition of claim 1 in the manufacture of a medicament for the treatment of a patient on statin therapy who has serum or plasma triglyceride levels of about 200 mg/dL to about 500 mg/dL.

79. The use of claim 77, wherein the effective amount of the pharmaceutical composition of claim 1 is at least about 2g per day.

80. The use of claim 77, wherein the effective amount of the pharmaceutical composition of claim 1 is at least about 3g per day.

81. The use of claim 77, wherein the effective amount of the pharmaceutical composition of claim 1 is at least about 4g per day.

82. The use of claim 77, wherein the effective amount of the pharmaceutical composition of claim 1 is about 2g per day.

83. Use of the pharmaceutical composition of claim 1 in the manufacture of a medicament for the treatment of a patient with elevated pre-treatment serum or plasma triglycerides,

wherein the treatment comprises administering the pharmaceutical composition of claim 1 to the patient in an amount and for a duration effective to reduce arachidonic acid (AA) concentration in plasma by at least about 5%.

84. The use of claim 83, wherein the treatment comprises administration of the pharmaceutical composition in an amount and for a duration effective to reduce plasma AA concentration by at least about 10%.

85. The use of claim 83, wherein the treatment comprises administration of the pharmaceutical composition in an amount and for a duration effective to reduce plasma AA concentration by at least about 20%.

86. Use of the pharmaceutical composition of claim 1 in the manufacture of a medicament for the treatment of a patient with elevated pre-treatment serum or plasma triglycerides,

wherein the treatment comprises administering the pharmaceutical composition of claim 1 to the patient in an amount and for a duration effective to reduce plasma arachidonic acid (AA) concentration by at least about 50 μg/mL.

87. The use of claim 86, wherein the treatment comprises administration of the pharmaceutical composition in an amount and for a duration effective to reduce plasma arachidonic acid concentration by at least about 75 μg/mL.

88. Use of the pharmaceutical composition of claim 1 in the manufacture of a medicament for the treatment of a patient with elevated pre-treatment serum or plasma triglycerides,

wherein the treatment comprises administering the pharmaceutical composition of claim 1 to the patient in an amount and for a duration effective to increase plasma EPA/AA ratio to at least about 0.25.

89. The use of claim 88, wherein the treatment comprises administration of the pharmaceutical composition in an amount and for a duration effective to increase plasma EPA/AA ratio to at least about 0.50.

90. The use of claim 89, wherein the treatment comprises administration of the pharmaceutical composition in an amount and for a duration effective to increase plasma EPA/AA ratio to at least about 0.65.

91. Use of the pharmaceutical composition of claim 1 in the manufacture of a medicament for lowering serum or plasma ApoCIII levels in a patient,

wherein the treatment comprises administering the pharmaceutical composition of claim 1 to the patient in an amount and for a duration sufficient to reduce serum or plasma ApoCIII from pre-treatment levels.

92. In a method of making a pharmaceutical composition of polyunsaturated fatty acids in free acid form, the improvement comprising:

subjecting an intermediate feedstock of transesterified fish oil comprising the ethyl esters of

EPA, in an amount of at least about 44% (a/a),

DHA, in an amount of at least about 14% (a/a), and

DPA, in an amount of at least about 1 % (a/a),

to a step of urea inclusion complexation,

wherein the amount of urea used for complexation is calculated according to formula I(a), or according to formula I(b), or according to both formula I(a) and formula I(b) wherein the urea amount is set to a value within the range set by, and inclusive of, the results of formulae I(a) and I(b),

$$[\text{Urea}] = F_{\text{enrichment-DHA}} * ((\text{DHA}_{\text{target}} - \text{DHA-EE}_{\text{input}})/\text{DHA-EE}_{\text{input}})) \quad \text{(Ia)}$$

$$[\text{Urea}] = F_{\text{enrichment-EPA}} * ((\text{EPA}_{\text{target}} - \text{EPA-EE}_{\text{input}})/\text{EPA-EE}_{\text{input}})) \quad \text{(Ib),}$$

[00100] wherein $F_{\text{enrichment-DHA}}$ and $F_{\text{enrichment-EPA}}$ are each about 100/0.34.

93. The method of claim 92, wherein

EPA-EE is present in the intermediate feedstock in an amount of at least about 45% (a/a),

DHA-EE is present in the intermediate feedstock in in an amount of at least about 15% (a/a), and

DPA-EE is present in the intermediate feedstock in in an amount of at least about 2.5% (a/a).

94. The method of claim 92, wherein the pharmaceutical composition is a pharmaceutical composition according to claim 1.

95. A pharmaceutical composition according to claim 1, made by a process according to claim 93.