WHAT IS CLAIMED IS:

1. A pharmaceutical composition, comprising:
Eicosapentaenoic acid ("EPA"), in a weight percent amount of 50% to 60%;
Docosahexaenoic acid ("DHA") in a weight percent amount of 17% to 23%;
Docosapentaenoic acid (n-3) ("DPA") in a weight percent amount of 1% to 8%;
wherein at least 90% by weight of the polyunsaturated acid in the composition is present in the free acid form.

2. The pharmaceutical composition of claim 1, wherein at least 95% by weight of the polyunsaturated fatty acid in the composition is present in the free acid form.

3. The pharmaceutical composition of claim 1, wherein:
DPA is present in a weight percent amount of at least about 2%.

4. The pharmaceutical composition of claim 1, wherein:
DPA is present in a weight percent amount of at least about 3%.

5. The pharmaceutical composition of claim 1, wherein:
DPA is present in a weight percent amount of at least about 4%.

6. The pharmaceutical composition of claim 1, wherein:
DPA is present in a weight percent amount of at least about 4.5%.

7. The pharmaceutical composition of claim 1, wherein:
EPA is present in a weight percent amount of about 55% to about 56%;
DHA is present in a weight percent amount of about 19% to about 20%; and
DPA is present in a weight percent amount of about 4%to about 5%.

8. A unit dosage form suitable for oral administration comprising a capsule encapsulating at least 500 mg of the pharmaceutical composition of any of claims 1 to 7.

9. The unit dosage form of claim 8, wherein: the capsule encapsulates about 1000 mg of the pharmaceutical composition of claim 1.

10. The unit dosage form of claim 9, wherein the capsule is a soft gelatin capsule.

11. The use of a pharmaceutical composition according to claim 1 in the manufacture of a medicament for the treatment of severe hypertriglyceridemia, wherein the treatment, once started, comprises the oral administration of the pharmaceutical composition of any one of claims 1 to 7 to a patient having pre-treatment serum or plasma triglyceride levels ≥500 mg/dL.

12. The use according to claim 11, wherein the treatment, once started, further comprises the oral administration of an effective amount of a statin.

13. The use according to claim 12, wherein the statin is selected from the group consisting of: pravastatin, lovastatin, simvastatin, atorvastatin, fluvastatin, rosuvastatin, and pitavastatin.

14. The use of a pharmaceutical composition according to claim 1 in the manufacture of a medicament for the treatment of patients who have serum or plasma triglyceride levels of about 200 mg/dL to about 500 mg/dL on statin therapy, wherein the treatment, once started, comprises the oral administration of an effective amount of a statin, and the oral administration of an effective amount of the pharmaceutical composition of claim 1.

15. The use according to claim 11 or 14, wherein the effective amount of the pharmaceutical composition is at least about 2g per day.

16. The use according to claim 11 or 14, wherein the effective amount of the pharmaceutical composition is at least about 3 g per day.

17. The use according to claim 11 or 14, wherein the effective amount of the pharmaceutical composition is at least about 4g per day.

18. A method of making a pharmaceutical composition of polyunsaturated fatty acids in free acid form according to claim 1, the improvement comprising:

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

EPA, in a weight percent amount of at least about 44%,

DHA, in a weight percent amount of at least about 14%, and

DPA, in a weight percent amount of at least about 1%,

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 l(b), or according to both formula l(a) and formula l(b)

wherein the urea amount is set to a value within the range set by, and inclusive of, the results

of formulae l(a) and l(b),

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

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

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

19. The method of claim 18, wherein

EPA-EE is present in the intermediate feedstock in a weight percent amount of at least about 45%,

DHA-EE is present in the intermediate feedstock in a weight percent amount of at least about 15%, and

DPA-EE is present in the intermediate feedstock in a weight percent amount of at least about 2.5%.

WHAT IS CLAIMED IS:

1. A pharmaceutical composition, comprising:
Eicosapentaenoic acid ("EPA"), in a weight percent amount of 50% to 60%;
Docosahexaenoic acid ("DHA") in a weight percent amount of 17% to 23%;
Docosapentaenoic acid (n-3) ("DPA") in a weight percent amount of 1% to 8%;
wherein at least 90% by weight of the polyunsaturated acid in the composition is present in the free acid form.

2. The pharmaceutical composition of claim 1, wherein at least 95% by weight of the polyunsaturated fatty acid in the composition is present in the free acid form.

3. The pharmaceutical composition of claim 1, wherein:
DPA is present in a weight percent amount of at least about 2%.

4. The pharmaceutical composition of claim 1, wherein:
DPA is present in a weight percent amount of at least about 3%.

5. The pharmaceutical composition of claim 1, wherein:
DPA is present in a weight percent amount of at least about 4%.

6. The pharmaceutical composition of claim 1, wherein:
DPA is present in a weight percent amount of at least about 4.5%.

7. The pharmaceutical composition of claim 1, wherein:
EPA is present in a weight percent amount of about 55% to about 56%;
DHA is present in a weight percent amount of about 19% to about 20%; and
DPA is present in a weight percent amount of about 4%to about 5%.

8. A unit dosage form suitable for oral administration comprising a capsule encapsulating at least 500 mg of the pharmaceutical composition of any of claims 1 to 7.

9. The unit dosage form of claim 8, wherein: the capsule encapsulates about 1000 mg of the pharmaceutical composition of claim 1.

10. The unit dosage form of claim 9, wherein the capsule is a soft gelatin capsule.

11. The use of a pharmaceutical composition according to claim 1 in the manufacture of a medicament for the treatment of severe hypertriglyceridemia, wherein the treatment, once started, comprises the oral administration of the pharmaceutical composition of any one of claims 1 to 7 to a patient having pre-treatment serum or plasma triglyceride levels ≥500 mg/dL.

12. The use according to claim 11, wherein the effective amount of the pharmaceutical composition is at least about 2g per day.

13. The use according to claim 11, wherein the effective amount of the pharmaceutical composition is at least about 3g per day.

14. The use according to claim 11, wherein the effective amount of the pharmaceutical composition is at least about 4g per day.

15. A method of making a pharmaceutical composition of polyunsaturated fatty acids in free acid form according to claim 1, the improvement comprising:
subjecting an intermediate feedstock of transesterified fish oil comprising the ethyl esters of
EPA, in a weight percent amount of at least about 44%,
DHA, in a weight percent amount of at least about 14%, and
DPA, in a weight percent amount of at least about 1%,
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 l(b), or according to both formula l(a) and formula l(b)
wherein the urea amount is set to a value within the range set by, and inclusive of, the results
of formulae l(a) and l(b),
$[Urea] = F_{enrichment\text{-}DHA} * ((DHA_{target} - DHA\text{-}EE_{input})/DHA\text{-}EE_{input}))$ (Ia)
$[Urea] = F_{enrichment\text{-}EPA} * ((EPA_{target} - EPA\text{-}EE_{input})/EPA\text{-}EE_{input}))$ (lb),

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

16. The method of claim 15, wherein

EPA-EE is present in the intermediate feedstock in a weight percent amount of at least about 45%,

DHA-EE is present in the intermediate feedstock in a weight percent amount of at least about 15%, and

DPA-EE is present in the intermediate feedstock in a weight percent amount of at least about 2.5%.