also known that, in certain species (*e.g.*, rat), the brain also preferably selects and absorbs RRR-alpha-tocopherol as compared to the seven other stereoisomers.

SUMMARY OF THE DISCLOSURE

[0004a] In one embodiment, there is provided a use of a nutritional composition comprising RRR-alpha-tocopherol and a carotenoid, in the manufacture of a medicament for improving the visual processing of a healthy infant.

[0004b] In one embodiment, there is provided a use of a nutritional composition comprising RRR-alpha-tocopherol and a carotenoid, in the manufacture of a medicament for of improving the visual acuity of a healthy infant.

[0004c] In one embodiment, there is provided a use of a nutritional composition comprising RRR-alpha-tocopherol, in the manufacture of a medicament for improving the visual processing of a healthy infant.

[0004d] In one embodiment, there is provided a use of a nutritional composition comprising RRR-alpha-tocopherol, in the manufacture of a medicament for improving the visual acuity of a healthy infant.

[0004e] In one embodiment, there is provided a use of a nutritional composition comprising RRR-alpha-tocopherol, in the manufacture of a medicament for improving the development of visual processing, visual acuity, or both visual processing and visual acuity in an infant.

[0005] Some embodiments of the present disclosure are directed to methods of improving the visual processing of a healthy infant, the method comprising administering a nutritional composition comprising RRR-alpha-tocopherol and a carotenoid to the infant.

[0006] Some embodiments of the present disclosure are directed to methods of improving the visual acuity of a healthy infant, the method comprising administering a nutritional composition comprising RRR-alpha-tocopherol and a carotenoid to the infant.

[0007] Some embodiments of the present disclosure are directed to methods of improving the visual processing of a healthy infant, the method comprising administering a nutritional composition comprising RRR-alpha-tocopherol to the infant.

[0008] Some embodiments of the present disclosure are directed to methods of improving the visual acuity of a healthy infant, the method comprising administering a nutritional composition comprising RRR-alpha-tocopherol to the infant.

[0009] Some embodiments of the present disclosure are directed to methods of improving the development of visual processing, visual acuity, or both in an infant, the method comprising administering a nutritional composition comprising RRR-alpha-tocopherol to the infant.

[0010] Some embodiments of the present disclosure are directed to methods of improving the development of visual processing, visual acuity, or both in a fetus, the method comprising administering a nutritional composition comprising RRR-alpha-tocopherol to a pregnant woman. Some embodiments of the present

What is claimed is:

1. Use of a nutritional composition comprising RRR-alpha-tocopherol and a carotenoid, in the manufacture of a medicament for mproving the visual processing of a healthy infant.

2. Use of a nutritional composition comprising RRR-alpha-tocopherol and a carotenoid, in the manufacture of a medicament for of improving the visual acuity of a healthy infant.

3. The use of claim 1 or 2 wherein the carotenoid is selected from the group consisting of α-carotene, ß-carotene, γ-carotene, lycopene, lutein, zeaxanthin, astaxanthin, α-cryptoxanthin, ß-cryptoxanthin, and combinations thereof.

4. The use of any one of claims 1-3 wherein the nutritional composition delivers about 0.5 mg to about 100 mg RRR-alpha-tocopherol per day to the infant.

5. The use of any one of claims 1-4 wherein the carotenoid comprises ß-carotene and the nutritional composition delivers about 5 µg to about 160 mg ß-carotene per day to the infant.

6. The use of any one of claims 1-4 wherein the carotenoid comprises lycopene and the nutritional composition delivers about 1.4 µg to about 180 mg lycopene per day to the infant.

7. The use of any one of claims 1-4 wherein the carotenoid comprises lutein and the nutritional composition delivers about 1 µg to about 240 mg lutein per day to the infant.

8. The use of any one of claims 1-4 wherein the carotenoid comprises zeaxanthin and the nutritional composition delivers about 1 µg to about 180 mg zeaxanthin per day to the infant.

9. The use of any one of claims 1-4 wherein the carotenoid comprises α-carotene and the nutritional composition delivers about 1 μg to about 180 mg α-carotene per day to the infant.

10. The use of any one of claims 1-4 wherein the carotenoid comprises α-cryptoxanthin and the nutritional composition delivers about 0.5 μg to about 90 mg α-cryptoxanthin per day to the infant.

11. The use of any one of claims 1-10 wherein the nutritional composition is a nutritional product further comprising at least one of protein, carbohydrate, and fat.

12. The use of claim 11 wherein the nutritional product is an infant nutritional formula comprising about 2% to about 75% protein, about 1% to about 85% carbohydrate, and about 5% to about 70% fat as percentages of the total calories.

13. The use of any one of claims 1-10 wherein the nutritional composition is a vitamin composition.

14. The use of claim 13 wherein the vitamin composition is in a form selected from the group consisting of tablets, chewable tablets, capsules, powders, aqueous liquids, oil-based liquids, slurries, syrups, elixirs, and combinations thereof.

15. The use of claim 13 or claim 14 wherein the vitamin composition further comprises at least one of Vitamin A, Vitamin D, Vitamin K, Coenzyme Q_{10}, α-linolenic acid, arachidonic acid, eicosapentaenoic acid, docosahexaenoic acid, and combinations thereof.

16. The use of any one of claims 1-15 wherein the infant is a premature infant.

17. The use of any one of claims 1-16 wherein the infant does not have ocular disease.

18. Use of a nutritional composition comprising RRR-alpha-tocopherol, in the manufacture of a medicament for improving the visual processing of a healthy infant.

19. Use of a nutritional composition comprising RRR-alpha-tocopherol, in the manufacture of a medicament for improving the visual acuity of a healthy infant.

20. The use of claim 18 or 19 wherein the nutritional composition delivers about 0.5 mg to about 100 mg RRR-alpha-tocopherol per day to the infant.

21. The use of any one of claims 18-20 wherein the nutritional composition is a nutritional product further comprising at least one of protein, carbohydrate, and fat.

22. The use of claim 21 wherein the nutritional product is an infant nutritional formula comprising about 2% to about 75% protein, about 1% to about 85% carbohydrate, and about 5% to about 70% fat as percentages of the total calories.

23. The use of any one of claims 18-20 wherein the nutritional composition is a vitamin supplement.

24. The use of claim 23 wherein the vitamin supplement is in a form selected from the group consisting of tablets, chewable tablets, capsules, powders, aqueous liquids, oil-based liquids, slurries, syrups, elixirs, and combinations thereof.

25. The use of claim 23 or claim 24 wherein the vitamin supplement further comprises at least one of Vitamin A, Vitamin D, Vitamin K, α-carotene, ß-carotene, lycopene, lutein, zeaxanthin, astaxanthin, α-cryptoxanthin, ß-cryptoxanthin, Coenzyme Q_{10}, α-linolenic acid, arachidonic acid, eicosapentaenoic acid, docosahexaenoic acid, and combinations thereof.

26. The use of any one of claims 18-25 wherein the nutritional composition is administered at least once per day.

27. The use of any one of claims 18-26 wherein the infant is a premature infant.

28. The use of any one of claims 18-27 wherein the infant does not have ocular disease.

29. The use of any one of claims 18-28 wherein the nutritional composition further comprises a carotenoid selected from the group consisting of α-carotene, ß-carotene, γ-carotene, lycopene, lutein, zeaxanthin, astaxanthin, α-cryptoxanthin, ß-cryptoxanthin, and combinations thereof.

30. Use of a nutritional composition comprising RRR-alpha-tocopherol, in the manufacture of a medicament for improving the development of visual processing, visual acuity, or both visual processing and visual acuity in an infant.

31. The use of claim 30 wherein the nutritional composition further comprises a carotenoid.

32. The use of claim 30 or 31 wherein the infant is a premature infant or a full-term infant.

33. The use of any one of claims 30-32 wherein the infant does not have ocular disease.

34. The use of any one of claims 30-33 wherein the nutritional composition is an infant nutritional formula.