Claims

1. ~~A~~ Use of a composition comprising at ~~least one carotenoid selected from the group consisting~~each of lutein, zeaxanthin and meso-zeaxanthin; and a composition comprising at least one omega-3 fatty acid in the manufacture of a medicament~~;~~ for ~~use in~~ the ~~prevention and/or~~ treatment of Alzheimer's disease ~~dementia~~ in a human subject having an MMSE score of 25 or less.

~~2. The composition according to claim 1, comprising each of lutein, zeaxanthin and meso-zeaxanthin.~~

~~3.~~2. The ~~composition~~ use according to claim 1 ~~or 2~~, wherein a single composition comprises each of lutein, zeaxanthin, meso-zeaxanthin and at least one omega-3 fatty acid.

~~4.~~3. The ~~composition~~ use according to ~~any one of the preceding claims~~claim 1 or 2, wherein the said at least one omega-3 fatty acid comprises docosahexaenoic acid.

~~5.~~4. The ~~composition~~ use according to any one of the preceding claims, wherein the said at least one omega-3 fatty acid is provided as a fish oil component in the composition.

~~6.~~5. The ~~composition~~ use according to any one of the preceding claims, wherein the said at least one omega-3 fatty acid comprises at least two fatty acids.

~~7.~~6. The ~~composition~~ use according to any one of the preceding claims, wherein the omega-3 fatty acid-containing composition comprises docosahexaenoic acid and eicosapentaenoic acid.

~~8.~~7. The ~~composition~~ use according to any one of the preceding claims, wherein the said at least one omega-3 fatty acid is provided as the free acid, as a salt or as a trigylceride.

8. The ~~composition~~ use according to claim ~~8~~7, wherein the salt comprises a monocation~~, preferably a metal monocation~~.

9. The use according to claim 8, wherein the salt comprises a metal monocation.

~~10. The composition according to any one of the preceding claims for use in the prevention and/or treatment of Alzheimer's disease.~~

~~11.~~10. The ~~composition~~ use according to any one of the preceding claims, wherein the composition/s is/are formulated to be suitable for oral consumption and is/are administered orally.

11. The ~~composition~~ use according to any one of the preceding claims, wherein the composition/s is/are administered ~~at least twice a week, preferably~~ at least three times a week~~, and most preferably daily~~.

12. The use according to any one of the preceding claims, wherein the composition/s is/are to be administered daily.

13. The ~~composition~~ use according to any one of the preceding claims, wherein the composition/s is/are in unit dose form.

14. The ~~composition~~ use according to claim 13, wherein each unit dose of composition comprises 10mgs meso-zeaxanthin, 10mgs lutein, 2mgs zeaxanthin, and fish oil, preferably 1gm fish oil.

15. The ~~composition~~ use according to claim 13, wherein each unit dose of composition comprises 15mgs meso-zeaxanthin, 5mgs lutein, 1mg zeaxanthin, and fish oil, preferably 1gm fish oil.

16. The ~~composition~~ use according to claim 13, wherein each unit dose of the composition comprises between 20mgs and 2grams of docosahexaenoic acid.

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17. The ~~composition~~ use according to any of one of the preceding claims, wherein the composition/s further comprise one or more of the following: acidity regulators; anticaking agents including sodium aluminosilicate, calcium or magnesium carbonate, calcium silicate, sodium or potassium ferricyanide; antioxidants including vitamin E, vitamin C, and polyphenols; colorings including artificial colorings FD&C Blue No. 1, Blue No. 2, Green No. 3, Red No. 40, Red No. 3, Yellow No. 5 and Yellow No. 6; and natural colorings caramel, annatto, cochineal, betanin, turmeric, saffron, paprika; color retention agents; emulsifiers; flavours; flavour enhancers; preservatives; stabilizers; sweeteners and thickeners.

18. The ~~composition~~ use according to any one of the preceding claims, wherein the composition/s is/are in the form of a tablet or capsule.

19. The ~~composition~~ use according to any one of the preceding claims, wherein the subject consumes the composition/s on a weekly or daily basis over a period of at least 6 months~~, preferably at least 12 months, and most preferably at least 18 months~~.

~~20. The composition according to any one of the preceding claims, wherein the subject already exhibits one or more symptoms of Alzheimer's disease prior to first administration of the composition/s.~~

20. The use according to any of claims 1-18, wherein the composition/s is/are to be administered on a weekly or daily basis over a period of at least 12 months

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~~21. The composition according to any one of claims 1-19, wherein the composition/s is/are first administered to the subject before the subject exhibits any symptoms of Alzheimer's disease.~~

~~22.~~21. The ~~composition~~ use according to any one of the preceding claims, ~~comprising use of a~~wherein the composition substantially ~~consisting~~ consists of lutein,

zeaxanthin, meso-zeaxanthin, at least one omega-3 poly-unsaturated fatty acid or corresponding salt or triglyceride, and a diluent, carrier or excipient.

~~23.~~22. The ~~composition~~ use according to claim ~~22~~21, wherein the omega-3 poly-unsaturated fatty acid or corresponding salt or triglyceride is DHA or a salt or triglyceride of DHA.

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~~24.~~23. The ~~composition~~ use according to any one of the preceding claims, wherein the composition ~~comprising~~ comprises each of lutein, zeaxanthin, meso-zeaxanthin and DHA and/or EPA, the composition being formulated in unit dose form for daily oral administration, for use in preventing or retarding the progression of cognitive impairment in a subject already exhibiting one or more symptoms of Alzheimer's disease prior to administration of the composition.

~~25. A method for the prevention and/or treatment of dementia, especially Alzheimer's disease, in a human subject, the method comprising the step of administering to the subject an effective amount of a composition comprising a macular carotenoid selected from the group consisting of lutein, zeaxanthin and meso-zeaxanthin; and an effective amount of a composition comprising at least one omega-3 fatty acid.~~

~~26. The method according to claim 25, comprising the use of a composition according to any one of claims 1-24.~~