CLAIMS

1. A powder composition comprising lutein and hydrogenated phospholipid encapsulated by a wall material, wherein the wall material is porous starch.

2. The composition according to claim 1, wherein the hydrogenated phospholipid is selected from the group consisting of: hydrogenated phosphatidylcholine, hydrogenated phosphatidylethanolamine, hydrogenated phosphatidylinosite, hydrogenated phosphatidylserine and hydrogenated lecithin.

3. The composition according to claim 2, wherein the hydrogenated phospholipid is hydrogenated L-α soybean phosphatidylcholine.

4. The composition according to any one of claims 1 to 3, wherein the powder composition comprises a weight ratio of 1-3 g hydrogenated phospholipid: 1 g lutein: 2.5-10 g porous starch.

5. The composition according to claim 4, wherein the powder composition comprises a weight ratio of 2-3 g hydrogenated phospholipid: 1 g lutein: 5-10 g porous starch.

6. The composition according to any one of claims 1 to 5, comprising a water content in the range of 1.5-1.1 wt%, 1.4-1.1 wt%, 1.3-1.1 wt%, or 1.2 wt%, by weight of said composition.

7. The composition according to any one of claims 1 to 6, formulated as a tablet or capsule.

8. A method of producing an encapsulated lutein composition, comprising:

i) mixing water and a hydrogenated phospholipid;

ii) adding lutein into the mixture of i) and further mixing for a period to obtain a lutein suspension;

iii) combining the lutein suspension with a suspension of porous starch and mixing for a period to achieve encapsulation;

iv) spray drying the encapsulated lutein.

9. The method according to claim 8, wherein the hydrogenated phospholipid is selected from the group consisting of: hydrogenated phosphatidylcholine, hydrogenated phosphatidylethanolamine, hydrogenated phosphatidylinosite, hydrogenated phosphatidylserine, and hydrogenated lecithin.

10. The method according to claim 9, wherein the hydrogenated phospholipid is hydrogenated L-α soybean phosphatidylcholine.

11. The method according to any one of claims 8 to 10, wherein the hydrogenated phospholipid in step iii) is at a concentration in the range of 2 g/L to 6 g/L.

12. The method according to claim 11, wherein the hydrogenated phospholipid in step iii) is at a concentration in the range of 5 g/L to 6 g/L.

13. The method according to any one of claims 8 to 12, wherein the lutein in step iii) is at a concentration of 2 g/L.

14. The method according to any one of claims 8 to 13, wherein the porous starch in step iii) is at a concentration in the range of 5 g/L to 20 g/L.

15. The method according to claim 14, wherein the porous starch in step iii) is at a concentration in the range of 10 g/L to 20 g/L.

16. The method according to any one of claims 8 to 15, wherein in step ii) the further mixing of lutein with the hydrogenated phospholipid is for a period of about 3 hr.

17. The method according to any one of claims 8 to 16, wherein in step ii) or step iii) the mixing is performed at a temperature in the range of 25°C to 60 °C.

18. The method according to any one of claims 8 to 17, wherein in step iii) said hydrogenated phospholipid is hydrogenated L-α soybean phosphatidylcholine in the range of 5-6 g/L; said lutein is at 2 g/L; and said porous starch is in the range of 10-20 g/L.