Claims:

1. A method for making a hydrogel contact lens capable of releasing phosphatidylcholine nanoparticles comprising the steps of:

a) providing a phosphatidylcholine,

b) providing a nonionic surfactant,

c) mixing the phosphatidylcholine, the nonionic surfactant with an aqueous solution to form a mixture, wherein the aqueous solution is free of an organic solvent,

d) high-energy treating the mixture of step c) to form a phosphatidylcholiner nanoparticle in the mixture with a first concentration in the mixture,

e) diluting the mixture of step d) with a buffered saline solution to form a packaging solution, wherein the packaging solution has phosphatidylcholiner nanoparticle with a second concentration,

f) packaging a hydrogel contact lens in a container containing the packaging solution,

g) autoclaving the hydrogel contact lens in the packaging solution to load the phosphatidylcholine nanoparticle into the hydrogel contact lens, wherein the packaging solution has a pH of from about 6.0 to about 8.0, an osmolality of from about 200 to about 450 mOsm/kg, wherein the first concentration of the phosphatidylcholine nanoparticle is higher than the second concentration of the phosphatidylcholine nanoparticle.

2. The method of claim 1, wherein the aqueous solution is a de-ionized water or a buffered saline.

3. The method of claim 1, wherein the first concentration of a phosphatidylcholiner nanoparticle in step d) is 1000-50000 ppm.

4. The method of claim 1, wherein the second concentration of the phosphatidylcholiner nanoparticle in step e) is 50 ppm-2000 mg/ml.

5. The method of claim 1, wherein the phosphatidylcholine comprises at least one member selected from the group consisting of 1,2-Didecanoyl-sn-glycero-3-phosphocholine (DDPC), 1,2-Dilauroyl-sn-glycero-3-phosphorylcholine (DLPC), Dimyristoylphosphatidylcholine (DMPC) , Dipalmitoylphosphatidylcholine (DPPC), 1,2-Distearoyl-sn-glycero-3-phosphocholine (DSPC), 1,2-Dioleoyl-sn-Glycero-3-Phosphocholine (DOPC), 1-palmitoyl-2-oleoyl-sn-glycero-3-phosphocholine (POPC), 1,2-Dierucoyl-sn-Glycero-3-Phosphatidylcholine (DEPC).

6. The method of claim 5, wherein the phosphatidylcholine is Dimyristoylphosphatidylcholine (DMPC) or Dipalmitoylphosphatidylcholine DPPC.

7. The method of claim 1, wherein the nonionic surfactant having a HLB vales at least 8.

8. The method of claim 1, wherein the nonionic surfactant having a HLB between 10 to 18.

9. The method of claim 8, wherein the nonionic surfactant at least one member selected from the group consisting of a poloamine, a poloxamer and a polyethylene glycol ester.

10. The method of claim 1, wherein high-energy treating is select from the group consisting of a high speed stirring with at least 800 rpm, a high pressure homogenizer or sonicating.

11. The method of claim 1, wherein the hydrogel contact lens is a silicone hydrogel contact lens.

12. The method of claim 11, wherein the hydrogel contact lens has a load of phosphatidylcholine nanoparticle from 10 µg/lens to 100 µg/lens.

13. An ophthalmic product, comprising a sealed and sterilized package which includes:

a packaging solution and a hydrogel contact lens immersed in the packaging solution, wherein the packaging solution includes:

a phosphatidylcholine nanoparticle**,** wherein the phosphatidylcholine nanoparticle is obtained by high-energy treating a mixture of an aqueous solution of the phosphatidylcholine and a nonionic surfactant, wherein the aqueous solution is free of an organic solvent,

one or more buffering agents in an amount sufficient to provide the packaging solution a pH of from about 6.0 to 8.0,

one or more tonicity agents in an amount sufficient to provide the packaging solution an osmolality of from about 200 to about 450 mOsm/kg, and

the hydrogel contact lens having a load of phosphatidylcholine nanoparticle from 10 µg/lens to 100 µg/lens.