CLAIMS

1. A children’s formula milk, characterized in that the raw materials of the children’s formula milk comprise prebiotics and compound nutrients in a ratio of prebiotics to compound nutrients of (5-13): (0.5-3) by mass; wherein the prebiotics comprise human milk oligosaccharides and the compound nutrients comprise vitamins and minerals.

2. The children’s formula milk according to claim 1, characterized in that the raw materials of the children’s formula milk comprise cow milk, phospholipids, compound nutrients, whey protein powder and prebiotics, and the mass ratio of the compound nutrients to the phospholipids is (0.5-3): (0.5-10).

3. The children’s formula milk according to claim 1 or 2, characterized in that the raw materials of the children’s formula milk further comprise condensed milk.

4. The children’s formula milk according to any one of claims 1-3, characterized in that the vitamins comprise: vitamin A, vitamin D, vitamin E and niacin; and the main ingredient of the minerals is zinc.

5. The children’s formula milk according to any one of claims 1-4, characterized in that the raw materials of the children’s formula milk comprise:

965 to 992 parts by weight of cow milk, 0.1 to 10 parts by weight of phospholipids, 0.1 to 10 parts by weight of compound nutrients, 0.5 to 10 parts by weight of whey protein powder, 1 to 30 parts by weight of galacto-oligosaccharide, 0.5 to 10 parts by weight of fructo-oligosaccharide, and 1 to 10 parts by weight of 2’-fucosyllactose.

6. The children’s formula milk according to any one of claims 1-5, characterized in that the raw materials of the children’s formula milk comprise:

965 to 992 parts by weight of cow milk, 0.1 to 5 parts by weight of phospholipids, 0.1 to 10 parts by weight of compound nutrients, 0.8 to 5 parts by weight of whey protein powder, 3 to 15 parts by weight of galacto-oligosaccharide, 2 to 8 parts by weight of fructo-oligosaccharide, and 1 to 9 parts by weight of 2’-fucosyllactose.

7. The children’s formula milk according to claim 5 or 6, characterized in that the raw materials of the children’s formula milk further comprise 0.5 to 50 or 1 to 10 parts by weight of condensed milk.

8. A method for preparing the children’s formula milk according to any one of claims 1-7, characterized in that it comprises:

hydrating cow milk and the whey protein powder to obtain a liquid material 1;

encapsulating the compound nutrients in milk fat globules formed by phospholipids and cow milk, to form a phospholipid-based emulsion encapsulating the compound nutrients, wherein the amount of the cow milk is 50-350 times that of phospholipids added;

sequentially dissolving fructo-oligosaccharide and 2’-fucosyllactose in cow milk at 30-50 °C to obtain a mixed liquid, and then adding galacto-oligosaccharides to the mixed liquid with shear stirring to obtain a liquid material 3;

wherein the amount of cow milk in the liquid material 1 is 20-80% of the total cow milk; the amount of cow milk in the liquid material 3 is 40-80% of the total cow milk; the protein content of the cow milk is 3.6 g/100 mL or more, and the native calcium content is ≥120mg/100mL.

9. The method for preparing the children’s formula milk according to claim 8, characterized in that the mixed liquid is obtained by sequentially dissolving condensed milk, fructo-

oligosaccharide and 2'-fucosyllactose in cow milk at 30-50° C.

10. The method for preparing the children's formula milk according to claim 8 or 9, characterized in that it comprises:

mixing the liquid material 1 with the phospholipid-based emulsion encapsulating the compound nutrients under stirring to obtain a mixed liquid material 1;

homogenizing the mixed liquid material 1, then mixing it with the liquid material 3, and making up the volume with cow milk to obtain a children's formula milk liquid material;

homogenizing, sterilizing, cooling, and filling the children's formula milk liquid material to obtain a finished product of the children's formula milk.

11. The method for preparing the children's formula milk according to any one of claims 8-10, characterized in that the compound nutrients are added in a manner comprising the following steps: adding phospholipids to cow milk at 40-80 °C under stirring at 300-3,000 rpm for 5-30 min, then adding the compound nutrients, and continuing stirring until both the phospholipids and the compound nutrients are completely dissolved in the cow milk, to obtain the phospholipid-based emulsion encapsulating the compound nutrients; wherein the amount of cow milk is 50-350 times that of said phospholipids added.

12. The method for preparing the children's formula milk according to any one of claims 8 to 11, characterized in that the whey protein powder is added in a manner comprising the following steps: adding the whey protein powder to cow milk at 30-50 °C at a feeding rate of ≤10 kg/min; after feeding, subjecting the mixture to circulating shear stirring for 10-40 minutes; and then allowing it to stand for hydration for 40-60 minutes, to obtain the liquid material 1.

13. The method for preparing the children's formula milk according to claim 10, characterized in that the mixed liquid material 1 is homogenized at a homogenization temperature of 50-70 °C, a total homogenization pressure of 110-300 bar, and a secondary pressure of 40-100 bar; and

the children's formula milk liquid material is homogenized at a homogenization temperature of 30-80 °C, a total homogenization pressure of 200-300 bar, and a secondary pressure of 40-100 bar.