CLAIMS

1. A formulation in solid form comprising:

- (a) a nutrient, wherein said nutrient is a mineral or a vitamin,

wherein said mineral is selected from the group comprising: (a-i) magnesium, (a-ii) calcium, (a-iii) iron, (a-iv) zinc, (a-v) iodine, (a-vi) selenium, (a-vii) chromium, and (a-viii) copper (II), and wherein said mineral is in the form of a salt or complex or oxide of said mineral; and

wherein said vitamin is selected from the group comprising: vitamin B12, vitamin C, vitamin D3, vitamin E;

- (b) a phospholipid, wherein said (b) phospholipid is a phosphatidylcholine or lecithin;
- (c) a first agent selected from (c-i) a carrageenan or (c-ii) an acacia gum; and
- (e) a gelatinised or pre-gelatinised starch of plant origin.

2. The formulation according to claim 1, wherein said (a-iii) iron in said formulation is in the form of iron pyrophosphate.

3. The formulation according to claim 1 or 2, wherein said formulation further comprises (d) at least one sucrester or a fatty acid carbohydrate ester;

preferably sucrester E473; more preferably sucrester (E473) comprising from 70% to 90% by weight, with respect to the total weight of the sucrester, of monoesters obtained through the esterification of sucrose with one or more fatty acids of plant origin, preferably said fatty acids are selected from stearic acid and/or palmitic acid.

4. The formulation according to any one of claims 1-3, wherein said (c) first agent consists of said (c-i) carrageenan; preferably carrageenan E407.

5. The formulation according to any one of claims 1-4, wherein said (c) first agent consists of said (cii) acacia gum;

preferably an acacia gum E414; more preferably an acacia gum E414 having an average molecular weight comprised in the range from 250,000 to 400,000.

6. The formulation according to any one of claims 1-5, wherein said (e) starch is selected from rice starch or corn starch; preferably, wherein said starch is pre-gelatinised rice starch.

7. The formulation according to any one of claims 1-6, wherein said (b) phospholipid is a lecithin (E322) selected from the group comprising or, alternatively, consisting of: sunflower lecithin, corn lecithin, soy lecithin and mixtures thereof.

8. The formulation according to any one of claims 1-7, wherein a weight ratio between said first agent (c) and said phospholipid (b) [(c):(b)], or, alternatively, a weight ratio between the weight of the sum of said first agent (c) and said sucrester (d), and the weight of said phospholipid [[(c)+(d)]:(b)] is comprised from 50:1 to 10:1, preferably from 40:1 to 10:1, more preferably from 30:1 to 15:1;
preferably wherein said (b) phospholipid is a lecithin.

9. The formulation according to any one of claims 3-8, wherein on 100 parts by weight of a sum of said first agent (c) and said sucrester (d), said first agent (c) is comprised in percentage by weight from 1% to 100% and said sucrester (d) is comprised from 0% (absent) to 99%;
preferably said (c) first agent from 50% to 95% and said (d) sucrester from 5% to 50%;
more preferably, said (c) first agent from 70% to 80% and said (d) sucrester from 20% to 30%.

10. A composition comprising:
- at least one solid form formulation of said nutrient according to any one of claims 1-9; and
- at least one acceptable pharmaceutical or food grade additive and/or excipient.

11. The composition according to claim 10, wherein said nutrient is a mineral.

12. The composition according to claim 10, wherein said nutrient is a vitamin.

13. The composition according to claim 10, wherein said composition comprises:
- at least one solid form formulation of a mineral according to any one of claims 1-9;
- at least one solid form formulation of a vitamin according to any one of claims 1-9; and at least one acceptable pharmaceutical or food grade additive and/or excipient.

14. The formulation or the composition according to any one of the preceding claims for use as medicament.

15. Use of the formulation or the composition according to any one of the preceding claims in the manufacture of a medicament for for the preventive and/or curative and/or adjuvant treatment of a

deficiency of said (a) mineral and/or vitamin, and of diseases, symptoms or disorders related to or deriving from said deficiency, in a subject in need.

16. The use according to claim 15, wherein said diseases or symptoms related to or deriving from said deficiency are selected from the group comprising or, alternatively, consisting of:

- sideropenia, anaemia, poor iron absorption, haemolytic anaemia;
- changes in carbohydrate metabolism and related diseases and disorders, diabetes, type II diabetes mellitus, hyperglycaemia, insulin resistance, high absorption of carbohydrates, deregulation of blood glucose level, metabolic syndrome;
- changes in the muscle energy metabolism and/or disorders related thereto decrease in muscle mass, decrease in muscle strength, decrease in physical resistance to muscle stress, poor absorption of amino acids;
- dyslipidaemia or change in the lipid metabolism and diseases and disorders related thereto, cholesterolaemia, high triglyceride levels, and obesity or overweight;
- cognitive disorders or changes in the cognitive-emotional sphere;
- cardiometabolic disorders:
- change in the immune system;
- stress related to anxiety and depression, fatigue, chronic fatigue, asthenia, a lack of reflexes and coordination;
- rickets or delayed bone growth in children, osteomalacia in adults, osteoporosis, and hyperparathyroidism.
- gingivitis; brittleness of the nails, hair and/or skin following inflammations or medical treatment.

17. Non-therapeutic use of the formulation or composition according to any one of claims 1-13 for the supplementation of said (a) mineral and/or vitamin in a healthy subject.

18. Non-therapeutic use according to claim 17, wherein said use is selected from: increasing muscle mass, increasing muscle strength, increasing physical resistance to muscle stress, reducing strength recovery time after a physical effort, increasing mental performance, strengthening nails and hair.

19. A process for the preparation of the formulation according to any one of claims 1 to 9 comprising the steps of:

- (1) providing a mineral or a vitamin (a) in the form of powder or granules, wherein said mineral is in the form of a salt, oxide or complex of said mineral, to obtain a mineral or a vitamin of step 1;
- (2) mixing - in the absence of solvent - said mineral or said vitamin of step 1 with a phospholipid (b),

preferably lecithin, to obtain a mixture of step 2;

- (3) mixing - in the absence of solvent - said mixture of step 2 with a polysaccharide (c) selected from (c-i) carrageenan or (c-ii) acacia gum and, optionally, with a sucrester (d), to obtain a mixture of step 3 or the formulation;

- (4) mixing said mixture of step 3 with a gelatinised or pre-gelatinised starch of plant origin (e), preferably pre-gelatinised rice starch, to obtain the formulation.

20. A process for the preparation of the composition according to claim 13 comprising the steps of:

- (i) providing at least one solid form formulation of a mineral **and** providing at least one solid form formulation of a vitamin according to any one of claims 1 to 9 or, alternatively, producing at least one solid form formulation of a mineral and producing at least one solid form formulation of a vitamin according to claim 19, to obtain said at least one solid form formulation of a mineral and said at least one solid form formulation of a vitamin;

- (ii) mixing said at least one solid form formulation of a mineral and said at least one solid form formulation of a vitamin to obtain a mixture of step (ii).

- (iii) mixing said mixture of step (ii) with at least one additive and/or excipient to obtain the composition.